Bruhat Bangalore Mahanagara Palike

Executive Engineer

Bytarayanapura Division

QUALITY REPORT

(9th & Part Bill)

Name of Work : PACKAGE NO-6 (CONSIST OF 14 WORKS)

Est. Cost: 1500.00 LAKHS
Job Code: 009-23-000003

MECADEZ
Insight Makes It Happen

Mecadez Core Technologies Private limited
Project Management Consultancy Services

Registered Office: No.80, Aniketana, 14th 'B' Main, West of Chord Road, 2nd Stage, 2nd Phase, Mahalakshmipuram, Bengaluru-560086
Ph: - +91-9538136111 +91-9483561234
E-mail: mecadez@gmail.com

Mecadez Core Technologies Private Limited

Project Management Consultancy Services

Summary of Frequencies of Field Tests and Lab Tests Conducted

Name of the work: **Package No.06 Consists of 14 Works**

Job No: **MCTPL/BBMP/EE/BTP/PMC/W-11/P-3877/2022-23/QR**

Contractor **M/s SMLP Aspahalts**

Sl. No	Particulars of the Tests	Plain Cement Concrete (1:3:6)			
		Quantity Cum	Frequency of Tests	Tests Required	Tests Carried Out
I	**Cement**	97.06	OPC 43 Grade		
1	Consistency test		1Test / Source of Supply	1	1
2	Fineness test		1Test / Source of Supply	1	1
3	Soundness test		1Test / Source of Supply	1	1
4	Compressive strength test				
i	7-days		1Test / Source of Supply	1	1
ii	28-days		1Test / Source of Supply	1	1
II	**Fine Aggregates**				
5	Gradation test		1Test / Day	1	1
III	**Coarse aggregates**				
6	Gradation test		1Test / Day	1	1
7	Water absorption test		Regular Intervals	1	1
8	Impact test		1Test / Source of Supply	1	1

Note: Frequency of tests as per Specifications MORT&H, V Revision, Section 900.

Consultant

Contractor

ASSISTANT ENGINEER

ASSISTANT EXE ENGINEER
Assistant Executive Engineer
Kodigehalli Sub Division
BBMP, Bangalore

Test Report
Consistency test

Project Name	Package No.06 Consists of 14 Works
Client	Executive Engineer - Byatarayanapura Division
Job No	MCTPL/BBMP/EE/BTP/PMC/W-11/P-3877/2022-23/QR
Mix Type	Plain Cement Concrete (1:3:6)
Contractor	M/s SMLP Aspahalts
Test Method	IS : 4031 (Part 5) -1988 & Specification for Road & Bridge Works, MORT&H, Rev-V.
Location	Source of Material
Material	Cement
Sample No	1
Sample Collection Date	17/Nov/2022
Testing Date	18-Nov-2022

Sl. No.	Description	Trial 1	Trial 2	Trial 3	Trial 4	Trial 5
1	Weight of Cement	400	400	400	400	400
2	Percentage of water added (%)	27	28.5	29.5	30	31
3	Weight of Water (gm)	108	114	118	120	124
4	Initial Reading of Plunger (mm)	40	40	40	40	40
5	Difference (mm)	22	18	16	13	5.5

Results: Standard Consistency of Cement: 31.00%

Note:

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For Mecadez Core Technologies Private Limited

Mecadez Core Technologies Private Limited

Authorised Signature

Assistant Executive Engineer
Kodigehalli Sub Division
BBMP, Bangalore

Test Report
Fineness test

Project Name	Package No.06 Consists of 14 Works
Client	Executive Engineer - Byatarayanapura Division
Job No	MCTPL/BBMP/EE/BTP/PMC/W-11/P-3877/2022-23/QR
Mix Type	Plain Cement Concrete (1:3:6)
Contractor	M/s SMLP Aspahalts
Test Method	IS : 4031 (Part 5) -1988 & Specification for Road & Bridge Works, MORT&H, Rev-V.
Location	Source of Material
Material	Cement
Sample No	1
Sample Collection Date	17/Nov/2022
Testing Date	18-Nov-2022

Sl. No.	Determination	Trial 1	Trial 2
1	Weight of Cement before sieve (gm)	100	100
2	Weight of residue retained on 90um sieve (gm)	6.1	5.2
3	Percentage retained (%)	6.1	5.2
4	Average Percentage retained (%)	5.65	

Results: Residue of cement is: 5.65%
Comments: Maximum allowable residue by mass for ordinary portlad cement is 10%
Note:

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For Mecadez Core Technologies Private Limited

Authorised Signature

Assistant Executive Engineer
Kodigehalli Sub Division
BBMP, Bangalore

Test Report
Soundness test

Project Name	Package No.06 Consists of 14 Works
Client	Executive Engineer - Byatarayanapura Division
Job No	MCTPL/BBMP/EE/BTP/PMC/W-11/P-3877/2022-23/QR
Mix Type	Plain Cement Concrete (1:3:6)
Contractor	M/s SMLP Aspahalts
Test Method	IS : 4031 (Part 3) -1988 & Specification for Road & Bridge Works, MORT&H, Rev-V.
Location	Source of Material
Material	Cement
Sample No	1
Sample Collection Date	17/Nov/2022
Testing Date	18-Nov-2022

Sl. No.	Description	Trial 1	Trial 2	Trial 3
1	Initial Distance between the indicator points of Lechatelier mould	11	10	11
2	Final Distance between the indicator points of Lechatelier mould	15	19	16
3	Difference or expansion	4	9	5
4	Average Differences or Expansion in mm	6.00		

Results: Difference in Expansion of Cement: 6.00 mm
Comments: Maximum allowable Expansion of cement is 10 mm.

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Authorised Signature

Assistant Executive Engineer
Kodigehalli Sub Division
BBMP, Bangalore

Test Report
Compressive strength test

Project Name	Package No.06 Consists of 14 Works
Client	Executive Engineer - Byatarayanapura Division
Job No	MCTPL/BBMP/EE/BTP/PMC/W-11/P-3877/2022-23/QR
Mix Type	Plain Cement Concrete (1:3:6)
Contractor	M/s SMLP Aspahalts
Test Method	IS : 4031 (part 6)-1988 & Specification for Road & Bridge Works, MORT&H, Rev. V.
Location	Source of Material
Material	Cement
Sample No	1
Sample Collection Date	17/Nov/2022
Testing Date	29-Nov-2022

Cube	Cement Grade	Age at Test (Days)	Slump (mm)	Weight (kg)	Dimension (LxWxH)	Density (kg/m3)	Max. Load (KN)	Area (mm2)	Compressive Strength (N/mm2)	Average Sample (N/mm2)
1	43	7	-	0.896	70.6x70.6x70.6	2302	168	4984.36	33.71	34.81
2	43	7	-	0.873	70.6x70.6x70.6	2415	179	4984.36	35.91	

Results: 7-days Compressive strength of cement is 34.81 N/mm^2

Comments: 7-days Compressive strength of cement should not be less than 33 N/mm^2

Note:

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For Mecadez Core Technologies Private Limited

Core Technologies Private Limited MECADEZ

Authorised Signature

Assistant Executive Engineer
Kodigehalli Sub Division
BBMP, Bangalore

No. 80, Aniketana, 14th 'B' Main, West of Chord Road, 2nd Stage, 2nd Phase, Mahalakshmipuram, Bengaluru - 560 086, Karnataka
mecadez@gmail.com +91 9538136111 +91 9483561234 www.mecadez.com

Test Report
Compressive strength test

Project Name	Package No.06 Consists of 14 Works
Client	Executive Engineer - Byatarayanapura Division
Job No	MCTPL/BBMP/EE/BTP/PMC/W-11/P-3877/2022-23/QR
Mix Type	Plain Cement Concrete (1:3:6)
Contractor	M/s SMLP Aspahalts
Test Method	IS : 4031 (part 6)-1988 & Specification for Road & Bridge Works, MORT&H, Rev. V.
Location	Source of Material
Material	Cement
Sample No	1
Sample Collection Date	17/Nov/2022
Testing Date	20-Dec-2022

Cube	Cement Grade	Age at Test (Days)	Slump (mm)	Weight (kg)	Dimension (LxWxH)	Density (kg/m3)	Max. Load (KN)	Area (mm2)	Compressive Strength (N/mm2)	Average Sample (N/mm2)
1	43	28	-	0.849	70.6x70.6x70.6	2287.00	222	4984.36	44.54	44.24
2	43	28	-	0.873	70.6x70.6x70.6	2316.00	219	4984.36	43.94	

Results: 28-days Compressive strength of cement is 44.24 N/mm^2

Comments: 28-days Compressive strength of cement should not be less than 43 N/mm^2

Note:

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For Mecadez Core Technologies Private Limited

Authorised Signature

Assistant Executive Engineer
Kodigehalli Sub Division
BBMP, Bangalore

Test Report
Gradation test

Project Name	Package No.06 Consists of 14 Works
Client	Executive Engineer - Byatarayanapura Division
Job No	MCTPL/BBMP/EE/BTP/PMC/W-11/P-3877/2022-23/QR
Mix Type	Plain Cement Concrete (1:3:6)
Contractor	M/s SMLP Aspahalts
Test Method	IS : 2386 (Part - 1) 1963 & Specification for Road & Bridge Works, MORT&H, Rev. V.
Location	Source of Material
Material	Fine Aggregates
Sample No	1
Sample Collection Date	17/Nov/2022
Testing Date	19-Nov-2022

Weight of Sample(gram): 200

Sl No.	IS Sieve Size	Weight retained	% retained	% Cumulative	Cumulative % of Passing		Remarks
					% Passing	Gradation limits	
1	10 mm	0	0.00	0.00	100.00	100	Gradation satisfies the MORT&H Zone II Specification for PCC
2	4.75 mm	16.95	8.48	8.48	91.53	90-100	
3	2.36 mm	13.48	6.74	15.22	84.79	75-100	
4	1.18 mm	33.58	16.79	32.01	68.00	55-90	
5	600 µ	57.62	28.81	60.82	39.19	35-59	
6	300 µ	42.65	21.33	82.14	17.86	8-30	
7	150 µ	25.64	12.82	94.96	5.04	0-10	

Note:

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For Mecadez Core Technologies Private Limited

Authorised Signature

Assistant Executive Engineer
Kodigehalli Sub Division
BBMP, Bangalore

Test Report
Gradation test

Project Name	Package No.06 Consists of 14 Works
Client	Executive Engineer - Byatarayanapura Division
Job No	MCTPL/BBMP/EE/BTP/PMC/W-11/P-3877/2022-23/QR
Mix Type	Plain Cement Concrete (1:3:6)
Contractor	M/s SMLP Aspahalts
Test Method	IS : 2386 (Part - 1) 1963 & Specification for Road & Bridge Works, MORT&H, Rev.
Location	Source of Material
Material	Coarse aggregates
Sample No	1
Sample Collection Date	17/Nov/2022
Testing Date	19-Nov-2022

Weight of Sample: 4000 gms

Sl. No	I.S. Sieve size	Weight Retained (gm)	Percentage of weight Retained (%)	Cumulative Percentage of weight retained (%)	Cumulative % of Passing		Remarks
					Test Result	Gradation Limits as per MORT&H	
1	31.50	0	0.00	0.00	100.00	100	
2	26.50	345.63	8.64	8.64	91.36	85-95	
3	19.00	315.69	7.89	16.53	83.47	68-88	
4	9.50	781.62	19.54	36.07	63.93	45-65	
5	4.75	458.87	11.47	47.55	52.45	30-55	
6	0.60	1058.63	26.47	74.01	25.99	8-30	
7	0.15	654.29	16.36	90.37	9.63	5-15	
8	0.08	282.39	7.06	97.43	2.57	0-5	

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Assistant Executive Engineer
Kodigehalli Sub Division
BBMP, Bangalore

Test Report
Gradation test

Project Name	Package No.06 Consists of 14 Works
Client	Executive Engineer - Byatarayanapura Division
Job No	MCTPL/BBMP/EE/BTP/PMC/W-11/P-3877/2022-23/QR
Mix Type	Plain Cement Concrete (1:3:6)
Contractor	M/s SMLP Aspahalts
Test Method	IS : 2386 (Part - 3) 1963 & Specification for Road & Bridge Works, MORT&H, Rev. V.
Location	Source of Material
Material	Coarse aggregates
Sample No	1
Sample Collection Date	17/Nov/2022
Testing Date	19-Nov-2022

Sl. No.	Particulars	Computations	Test Numbers		Mean
			Test 1	Test 2	
1	Weight of SSD sample	W_1 g	763	763	
2	Wt of Basket Filled with Aggregates Immersed in water	W_2g	2098	2046	
3	Weight of Saturated Aggregate in water	W_sg = W_2- W_1	1335	1283	
4	Weight of saturated surface dry aggregate in Air	W_3 g	2133	2071	
5	Weight of water equal to the Volume of the Aggregate	W_3- W_s	798	788	
6	Weight of Oven dried Aggregate	W_4g	2094	2037	
7	Specific Gravity	W_4/(W_3- W_s)	2.62	2.59	2.60
8	Apparent Specific Gravity	W_4/(W_4- W_s)	2.76	2.70	2.73
9	Water Absorption	(W_4- W_3)*100/ W_4	1.86	1.67	1.77

Comments: Maximum allowable Aggregate Water Absorption value is 2.0%.

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For Mecadez Core Technologies Private Limited

Authorised Signature

Assistant Executive Engineer
Kodigehalli Sub Division
BBMP, Bangalore

Impact test

Project Name	Package No.06 Consists of 14 Works
Client	Executive Engineer - Byatarayanapura Division
Job No	MCTPL/BBMP/EE/BTP/PMC/W-11/P-3877/2022-23/QR
Mix Type	Plain Cement Concrete (1:3:6)
Contractor	M/s SMLP Aspahalts
Test Method	IS : 2386 (Part - 4) 1963 & Specification for Road & Bridge Works, MORT&H, Rev. V.
Location	Source of Material
Material	Coarse aggregates
Sample No	1
Sample Collection Date	17/Nov/2022
Testing Date	19-Nov-2022

Sl. No.	Determination	Unit	Trails	
1	Weight of empty cylinder, w1	gm	960	960
2	Weight of container filled with Aggregate, w2	gm	1248	1478
3	Weight of the Aggregate before compaction, (w2 - w1) = w3	gm	288	518
4	Weight of the sample passing through 2.36 mm IS sieves after Impact, w4	gm	94	92
5	Weight of the sample retained on 2.36 mm IS sieve after Impact, w5	gm	194	426
6	Aggregate Impact Value (w4 / w3)x100	%	32.64	17.76
7	Specified Limit	%	45.00	

Results: Average Aggregate Impact Value: **25.20** %

Note:

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For Mecadez Core Technologies Private Limited

Authorised Signature

Assistant Executive Engineer
Kodigehalli Sub Division
BBMP, Bangalore

Mecadez Core Technologies Private Limited

Project Management Consultancy Services

Summary of Frequencies of Field Tests and Lab Tests Conducted

Name of the work: **Package No.06 Consists of 14 Works**

Job No: **MCTPL/BBMP/EE/BTP/PMC/W-11/P-3877/2022-23/QR**

Contractor **M/s SMLP Aspahalts**

Sl. No	Particulars of the Tests	M20 Concrete For Drain Raft			
		Quantity Cum	Frequency of Tests	Tests Required	Tests Carried Out
IV	**Concrete**				
1	Compressive strength test	111.54	1 to 5cum=1 sample 6 to 15 cum=2 sample 16 to 30cum=3 smaple 31 to 50cum= 4 sample 51cum and above= one additonal sample for every additional 50 cum or part therof	6	6
	7-days				
	28-days				

Note: Frequency of tests as per Specifications MORT&H, V Revision, Section 900.

consultant

contractor

ASSISTANT ENGINEER

ASSISTANT EXE ENGINEER

Assistant Executive Engineer
Kodigehalli Sub Division
BBMP, Bangalore

Test Report
Concrete Compresive strength

Project Name	Package No.06 Consists of 14 Works
Client	Executive Engineer - Byatarayanapura Division
Job No	MCTPL/BBMP/EE/BTP/PMC/W-11/P-3877/2022-23/QR
Mix Type	M20 Concrete For Drain Raft
Contractor	M/s SMLP Aspahalts
Test Method	IS : 4031 (part 6)-1988 & Specification for Road & Bridge Works, MORT&H, Rev. V.
Location	Laboratory
Material	Concrete
Sample No	1
Casting Date	25-Nov-2022
Tested Date	2-Dec-2022

Cube	Concrete Grade	Age at Test (Days)	Weight (kg)	Dimension (LxWxH)	Density (kg/m^3)	Max. Load (KN)	Area (m^2)	Compressive Strength (N/mm^2)	Avg. Sample Strength	Avg. Strength (N/mm2)
1	20	7	8.49	150*150*150	2515.56	321.00	0.0225	14.27	14.46	14.47
2	20	7	8.46	150*150*150	2506.67	330.00	0.0225	14.67		
3	20	7	8.26	150*150*150	2447.41	325.00	0.0225	14.44		
4	20	7	8.79	150*150*150	2604.44	329.00	0.0225	14.62	14.49	
5	20	7	8.16	150*150*150	2417.78	323.00	0.0225	14.36		
6	20	7	8.29	150*150*150	2456.30	326.00	0.0225	14.49		

Results: 7-days Compressive strength of Concrete is 14.47 N/mm2

Comments: 7-days Compressive strength of M20 Concrete should not be less than 14 N/mm2

Note:

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Mecadez Core Technologies Private Limited

Authorised Signature

Assistant Executive Engineer
Kodigehalli Sub Division
BBMP, Bangalore

Test Report
Concrete Compresive strength

Project Name	Package No.06 Consists of 14 Works
Client	Executive Engineer - Byatarayanapura Division
Job No	MCTPL/BBMP/EE/BTP/PMC/W-11/P-3877/2022-23/QR
Mix Type	M20 Concrete For Drain Raft
Contractor	M/s SMLP Aspahalts
Test Method	IS : 4031 (part 6)-1988 & Specification for Road & Bridge Works, MORT&H, Rev. V.
Location	Laboratory
Material	Concrete
Sample No	2
Casting Date	25-Nov-2022
Tested Date	2-Dec-2022

Cube	Concrete Grade	Age at Test (Days)	Weight (kg)	Dimension (LxWxH)	Density (kg/m^3)	Max. Load (KN)	Area (m^2)	Compressive Strength (N/mm^2)	Avg. Sample Strength	Avg. Strength (N/mm2)
1	20	7	8.64	150*150*150	2560.00	329.00	0.0225	14.62	14.55	14.50
2	20	7	8.61	150*150*150	2551.11	324.00	0.0225	14.40		
3	20	7	8.34	150*150*150	2471.11	329.00	0.0225	14.62		
4	20	7	8.49	150*150*150	2515.56	321.00	0.0225	14.27	14.44	
5	20	7	8.67	150*150*150	2568.89	328.00	0.0225	14.58		
6	20	7	8.32	150*150*150	2465.19	326.00	0.0225	14.49		

Results: 7-days Compressive strength of Concrete is 14.50 N/mm2

Comments: 7-days Compressive strength of M20 Concrete should not be less than 14 N/mm2

Note:

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Mecadez Core Technologies Private Limited

Authorised Signature

Assistant Executive Engineer
Kodigehalli Sub Division
BBMP, Bangalore

Test Report
Concrete Compresive strength

Project Name	Package No.06 Consists of 14 Works
Client	Executive Engineer - Byatarayanapura Division
Job No	MCTPL/BBMP/EE/BTP/PMC/W-11/P-3877/2022-23/QR
Mix Type	M20 Concrete For Drain Raft
Contractor	M/s SMLP Aspahalts
Test Method	IS : 4031 (part 6)-1988 & Specification for Road & Bridge Works, MORT&H, Rev. V.
Location	Laboratory
Material	Concrete
Sample No	3
Casting Date	25-Nov-2022
Tested Date	2-Dec-2022

Cube	Concrete Grade	Age at Test (Days)	Weight (kg)	Dimension (LxWxH)	Density (kg/m^3)	Max. Load (KN)	Area (m^2)	Compressive Strength (N/mm^2)	Avg. Sample Strength	Avg. Strength (N/mm2)
1	20	7	8.26	150*150*150	2447.41	331.00	0.0225	14.71	14.64	14.59
2	20	7	8.49	150*150*150	2515.56	326.00	0.0225	14.49		
3	20	7	8.27	150*150*150	2450.37	331.00	0.0225	14.71		
4	20	7	8.69	150*150*150	2574.81	323.00	0.0225	14.36	14.53	
5	20	7	8.21	150*150*150	2432.59	330.00	0.0225	14.67		
6	20	7	8.63	150*150*150	2557.04	328.00	0.0225	14.58		

Results: 7-days Compressive strength of Concrete is 14.59 N/mm2

Comments: 7-days Compressive strength of M20 Concrete should not be less than 14 N/mm2

Note:

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Mecadez Core Technologies Private Limited

Authorised Signature

Assistant Executive Engineer
Kodigehalli Sub Division
BBMP, Bangalore

Test Report
Concrete Compresive strength

Project Name	Package No.06 Consists of 14 Works
Client	Executive Engineer - Byatarayanapura Division
Job No	MCTPL/BBMP/EE/BTP/PMC/W-11/P-3877/2022-23/QR
Mix Type	M20 Concrete For Drain Raft
Contractor	M/s SMLP Aspahalts
Test Method	IS : 4031 (part 6)-1988 & Specification for Road & Bridge Works, MORT&H, Rev. V.
Location	Laboratory
Material	Concrete
Sample No	4
Casting Date	3-Dec-2022
Tested Date	10-Dec-2022

Cube	Concrete Grade	Age at Test (Days)	Weight (kg)	Dimension (LxWxH)	Density (kg/m^3)	Max. Load (KN)	Area (m^2)	Compressive Strength (N/mm^2)	Avg. Sample Strength	Avg. Strength (N/mm2)
1	20	7	8.62	150*150*150	2554.07	333.00	0.0225	14.80	14.73	14.67
2	20	7	8.59	150*150*150	2545.19	328.00	0.0225	14.58		
3	20	7	8.47	150*150*150	2509.63	333.00	0.0225	14.80		
4	20	7	8.32	150*150*150	2465.19	325.00	0.0225	14.44	14.62	
5	20	7	8.19	150*150*150	2426.67	332.00	0.0225	14.76		
6	20	7	8.46	150*150*150	2506.67	330.00	0.0225	14.67		

Results: 7-days Compressive strength of Concrete is 14.67 N/mm2

Comments: 7-days Compressive strength of M20 Concrete should not be less than 14 N/mm2

Note:

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Mecadez Core Technologies Private Limited

Authorized Signatory

Assistant Executive Engineer
Kodigehalli Sub Division
BBMP, Bangalore

Test Report
Concrete Compresive strength

Project Name	Package No.06 Consists of 14 Works
Client	Executive Engineer - Byatarayanapura Division
Job No	MCTPL/BBMP/EE/BTP/PMC/W-11/P-3877/2022-23/QR
Mix Type	M20 Concrete For Drain Raft
Contractor	M/s SMLP Aspahalts
Test Method	IS : 4031 (part 6)-1988 & Specification for Road & Bridge Works, MORT&H, Rev. V.
Location	Laboratory
Material	Concrete
Sample No	5
Casting Date	3-Dec-2022
Tested Date	10-Dec-2022

Cube	Concrete Grade	Age at Test (Days)	Weight (kg)	Dimension (LxWxH)	Density (kg/m^3)	Max. Load (KN)	Area (m^2)	Compressive Strength (N/mm^2)	Avg. Sample Strength	Avg. Strength (N/mm2)
1	20	7	8.95	150*150*150	2651.85	335.00	0.0225	14.89	14.81	14.76
2	20	7	8.46	150*150*150	2506.67	330.00	0.0225	14.67		
3	20	7	8.62	150*150*150	2554.07	335.00	0.0225	14.89		
4	20	7	8.27	150*150*150	2450.37	327.00	0.0225	14.53	14.71	
5	20	7	8.64	150*150*150	2560.00	334.00	0.0225	14.84		
6	20	7	8.21	150*150*150	2432.59	332.00	0.0225	14.76		

Results: 7-days Compressive strength of Concrete is 14.76 N/mm2

Comments: 7-days Compressive strength of M20 Concrete should not be less than 14 N/mm2

Note:

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iv. Any query regarding the report must be reported immediately.

Mecadez Core Technologies Private Limited

Mecadez Core Technologies Private Limited MECADEZ

Authorised Signature

Assistant Executive Engineer
Kodigehalli Sub Division
BBMP, Bengaluru

Test Report
Concrete Compresive strength

Project Name	Package No.06 Consists of 14 Works
Client	Executive Engineer - Byatarayanapura Division
Job No	MCTPL/BBMP/EE/BTP/PMC/W-11/P-3877/2022-23/QR
Mix Type	M20 Concrete For Drain Raft
Contractor	M/s SMLP Aspahalts
Test Method	IS : 4031 (part 6)-1988 & Specification for Road & Bridge Works, MORT&H, Rev. V.
Location	Laboratory
Material	Concrete
Sample No	6
Casting Date	3-Dec-2022
Tested Date	10-Dec-2022

Cube	Concrete Grade	Age at Test (Days)	Weight (kg)	Dimension (LxWxH)	Density (kg/m^3)	Max. Load (KN)	Area (m^2)	Compressive Strength (N/mm^2)	Avg. Sample Strength	Avg. Strength
1	20	7	9.05	150*150*150	2681.48	337.00	0.0225	14.98	14.90	14.85
2	20	7	8.56	150*150*150	2536.30	332.00	0.0225	14.76		
3	20	7	8.72	150*150*150	2583.70	337.00	0.0225	14.98		
4	20	7	8.37	150*150*150	2480.00	329.00	0.0225	14.62	14.80	
5	20	7	8.74	150*150*150	2589.63	336.00	0.0225	14.93		
6	20	7	8.31	150*150*150	2462.22	334.00	0.0225	14.84		

Results: 7-days Compressive strength of Concrete is 14.85 N/mm2
Comments: 7-days Compressive strength of M20 Concrete should not be less than 14 N/mm2

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Assistant Executive Engineer
Kodigehalli Sub Division
BBMP, Bangalore

Test Report
Concrete Compresive strength

Project Name	Package No.06 Consists of 14 Works
Client	Executive Engineer - Byatarayanapura Division
Job No	MCTPL/BBMP/EE/BTP/PMC/W-11/P-3877/2022-23/QR
Mix Type	M20 Concrete For Drain Raft
Contractor	M/s SMLP Aspahalts
Test Method	IS : 4031 (part 6)-1988 & Specification for Road & Bridge Works, MORT&H, Rev. V.
Location	Laboratory
Material	Concrete
Sample No	1
Casting Date	25-Nov-2022
Tested Date	23-Dec-2022

Cube	Concrete Grade	Age at Test (Days)	Weight (kg)	Dimension (LxWxH)	Density (kg/m^3)	Max. Load (KN)	Area (m^2)	Compressive Strength (N/mm^2)	Avg. Sample Strength	Avg. Strength (N/mm2)
1	20	28	8.65	150*150*150	2562.96	450.00	0.0225	20.00	20.43	20.45
2	20	28	8.49	150*150*150	2515.56	460.00	0.0225	20.44		
3	20	28	8.16	150*150*150	2417.78	469.00	0.0225	20.84		
4	20	28	8.73	150*150*150	2586.67	458.00	0.0225	20.36	20.47	
5	20	28	8.24	150*150*150	2441.48	453.00	0.0225	20.13		
6	20	28	8.69	150*150*150	2574.81	471.00	0.0225	20.93		

Results: 28-days Compressive strength of Concrete is 20.45 N/mm2

Comments: 28-days Compressive strength of M20 Concrete should not be less than 20 N/mm2

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Assistant Executive Engineer
Kodigehalli Sub Division
BBMP, Bangalore

Test Report
Concrete Compresive strength

Project Name	Package No.06 Consists of 14 Works
Client	Executive Engineer - Byatarayanapura Division
Job No	MCTPL/BBMP/EE/BTP/PMC/W-11/P-3877/2022-23/QR
Mix Type	M20 Concrete For Drain Raft
Contractor	M/s SMLP Aspahalts
Test Method	IS : 4031 (part 6)-1988 & Specification for Road & Bridge Works, MORT&H, Rev. V.
Location	Laboratory
Material	Concrete
Sample No	2
Casting Date	25-Nov-2022
Tested Date	23-Dec-2022

Cube	Concrete Grade	Age at Test (Days)	Weight (kg)	Dimension (LxWxH)	Density (kg/m^3)	Max. Load (KN)	Area (m^2)	Compressive Strength (N/mm^2)	Avg. Sample Strength	Avg. Strength (N/mm2)
1	20	28	8.16	150*150*150	2417.78	453.00	0.0225	20.13	20.50	20.45
2	20	28	8.43	150*150*150	2497.78	459.00	0.0225	20.40		
3	20	28	8.92	150*150*150	2642.96	472.00	0.0225	20.98		
4	20	28	8.62	150*150*150	2554.07	469.00	0.0225	20.84	20.40	
5	20	28	8.27	150*150*150	2450.37	453.00	0.0225	20.13		
6	20	28	8.65	150*150*150	2562.96	455.00	0.0225	20.22		

Results: 28-days Compressive strength of Concrete is 20.45 N/mm2

Comments: 28-days Compressive strength of M20 Concrete should not be less than 20 N/mm2

Note:

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Assistant Executive Engineer
Kodigehalli Sub Division
BBMP, Bangalore

Test Report
Concrete Compresive strength

Project Name	Package No.06 Consists of 14 Works
Client	Executive Engineer - Byatarayanapura Division
Job No	MCTPL/BBMP/EE/BTP/PMC/W-11/P-3877/2022-23/QR
Mix Type	M20 Concrete For Drain Raft
Contractor	M/s SMLP Aspahalts
Test Method	IS : 4031 (part 6)-1988 & Specification for Road & Bridge Works, MORT&H, Rev. V.
Location	Laboratory
Material	Concrete
Sample No	3
Casting Date	25-Nov-2022
Tested Date	23-Dec-2022

Cube	Concrete Grade	Age at Test (Days)	Weight (kg)	Dimension (LxWxH)	Density (kg/m^3)	Max. Load (KN)	Area (m^2)	Compressive Strength (N/mm^2)	Avg. Sample Strength	Avg. Strength (N/mm2)
1	20	28	8.25	150*150*150	2444.44	455.00	0.0225	20.22	20.59	20.54
2	20	28	8.52	150*150*150	2524.44	461.00	0.0225	20.49		
3	20	28	9.01	150*150*150	2669.63	474.00	0.0225	21.07		
4	20	28	8.71	150*150*150	2580.74	471.00	0.0225	20.93	20.49	
5	20	28	8.36	150*150*150	2477.04	455.00	0.0225	20.22		
6	20	28	8.74	150*150*150	2589.63	457.00	0.0225	20.31		

Results: 28-days Compressive strength of Concrete is 20.54 N/mm2

Comments: 28-days Compressive strength of M20 Concrete should not be less than 20 N/mm2

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Assistant Executive Engineer
Kodigehalli Sub Division
BBMP, Bangalore

Test Report
Concrete Compresive strength

Project Name	Package No.06 Consists of 14 Works
Client	Executive Engineer - Byatarayanapura Division
Job No	MCTPL/BBMP/EE/BTP/PMC/W-11/P-3877/2022-23/QR
Mix Type	M20 Concrete For Drain Raft
Contractor	M/s SMLP Aspahalts
Test Method	IS : 4031 (part 6)-1988 & Specification for Road & Bridge Works, MORT&H, Rev. V.
Location	Laboratory
Material	Concrete
Sample No	4
Casting Date	3-Dec-2022
Tested Date	31-Dec-2022

Cube	Concrete Grade	Age at Test (Days)	Weight (kg)	Dimension (LxWxH)	Density (kg/m^3)	Max. Load (KN)	Area (m^2)	Compressive Strength (N/mm^2)	Avg. Sample Strength	Avg. Strength (N/mm2)
1	20	28	8.35	150*150*150	2474.07	457.00	0.0225	20.31	20.68	20.63
2	20	28	8.62	150*150*150	2554.07	463.00	0.0225	20.58		
3	20	28	9.11	150*150*150	2699.26	476.00	0.0225	21.16		
4	20	28	8.81	150*150*150	2610.37	473.00	0.0225	21.02	20.58	
5	20	28	8.46	150*150*150	2506.67	457.00	0.0225	20.31		
6	20	28	8.84	150*150*150	2619.26	459.00	0.0225	20.40		

Results: 28-days Compressive strength of Concrete is 20.63 N/mm2

Comments: 28-days Compressive strength of M20 Concrete should not be less than 20 N/mm2

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Assistant Executive Engineer
Kodigehalli Sub Division
BBMP, Bangalore

Test Report
Concrete Compresive strength

Project Name	Package No.06 Consists of 14 Works
Client	Executive Engineer - Byatarayanapura Division
Job No	MCTPL/BBMP/EE/BTP/PMC/W-11/P-3877/2022-23/QR
Mix Type	M20 Concrete For Drain Raft
Contractor	M/s SMLP Aspahalts
Test Method	IS : 4031 (part 6)-1988 & Specification for Road & Bridge Works, MORT&H, Rev. V.
Location	Laboratory
Material	Concrete
Sample No	5
Casting Date	3-Dec-2022
Tested Date	31-Dec-2022

Cube	Concrete Grade	Age at Test (Days)	Weight (kg)	Dimension (LxWxH)	Density (kg/m^3)	Max. Load (KN)	Area (m^2)	Compressive Strength (N/mm^2)	Avg. Sample Strength	Avg. Strength (N/mm2)
1	20	28	8.44	150*150*150	2500.74	459.00	0.0225	20.40	20.77	20.72
2	20	28	8.71	150*150*150	2580.74	465.00	0.0225	20.67		
3	20	28	9.20	150*150*150	2725.93	478.00	0.0225	21.24		
4	20	28	8.90	150*150*150	2637.04	475.00	0.0225	21.11	20.67	
5	20	28	8.55	150*150*150	2533.33	459.00	0.0225	20.40		
6	20	28	8.93	150*150*150	2645.93	461.00	0.0225	20.49		

Results: 28-days Compressive strength of Concrete is 20.72 N/mm2

Comments: 28-days Compressive strength of M20 Concrete should not be less than 20 N/mm2

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Assistant Executive Engineer
Kodigehalli Sub Division
BBMP, Bangalore

Test Report
Concrete Compresive strength

Project Name	Package No.06 Consists of 14 Works
Client	Executive Engineer - Byatarayanapura Division
Job No	MCTPL/BBMP/EE/BTP/PMC/W-11/P-3877/2022-23/QR
Mix Type	M20 Concrete For Drain Raft
Contractor	M/s SMLP Aspahalts
Test Method	IS : 4031 (part 6)-1988 & Specification for Road & Bridge Works, MORT&H, Rev. V.
Location	Laboratory
Material	Concrete
Sample No	6
Casting Date	3-Dec-2022
Tested Date	31-Dec-2022

Cube	Concrete Grade	Age at Test (Days)	Weight (kg)	Dimension (LxWxH)	Density (kg/m^3)	Max. Load (KN)	Area (m^2)	Compressive Strength (N/mm^2)	Avg. Sample Strength	Avg. Strength
1	20	28	8.54	150*150*150	2530.37	461.00	0.0225	20.49	20.86	20.81
2	20	28	8.81	150*150*150	2610.37	467.00	0.0225	20.76		
3	20	28	9.30	150*150*150	2755.56	480.00	0.0225	21.33		
4	20	28	9.00	150*150*150	2666.67	477.00	0.0225	21.20	20.76	
5	20	28	8.65	150*150*150	2562.96	461.00	0.0225	20.49		
6	20	28	9.03	150*150*150	2675.56	463.00	0.0225	20.58		

Results: 28-days Compressive strength of Concrete is 20.81 N/mm2
Comments: 28-days Compressive strength of M20 Concrete should not be less than 20 N/mm2

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Assistant Executive Engineer
Kodigehalli Sub Division
BBMP, Bangalore

Mecadez Core Technologies Private Limited

Project Management Consultancy Services

Summary of Frequencies of Field Tests and Lab Tests Conducted

Name of the work: **Package No.06 Consists of 14 Works**

Job No: **MCTPL/BBMP/EE/BTP/PMC/W-11/P-3877/2022-23/QR**

Contractor **M/s SMLP Aspahalts**

Sl. No	Particulars of the Tests	M20 Concrete For Drain Wall			
		Quantity Cum	Frequency of Tests	Tests Required	Tests Carried Out
IV	**Concrete**				
1	Compressive strength test	118.61	1 to 5cum=1 sample 6 to 15 cum=2 sample 16 to 30cum=3 smaple 31 to 50cum= 4 sample 51cum and above= one additonal sample for every additional 50 cum or part therof	6	6
	7-days				
	28-days				

Note: Frequency of tests as per Specifications MORT&H, V Revision, Section 900.

Mecadez Core Technologies Private Limited

consultant

contractor

ASSISTANT ENGINEER

ASSISTANT EXE ENGINEER

Kodigehalli Sub Division

BBMP, Bangalore

Test Report
Concrete Compresive strength

Project Name	Package No.06 Consists of 14 Works
Client	Executive Engineer - Byatarayanapura Division
Job No	MCTPL/BBMP/EE/BTP/PMC/W-11/P-3877/2022-23/QR
Mix Type	M20 Concrete For Drain Wall
Contractor	M/s SMLP Aspahalts
Test Method	IS : 4031 (part 6)-1988 & Specification for Road & Bridge Works, MORT&H, Rev. V.
Location	Laboratory
Material	Concrete
Sample No	1
Casting Date	2-Dec-2022
Tested Date	9-Dec-2022

Cube	Concrete Grade	Age at Test (Days)	Weight (kg)	Dimension (LxWxH)	Density (kg/m^3)	Max. Load (KN)	Area (m^2)	Compressive Strength (N/mm^2)	Avg. Sample Strength	Avg. Strength (N/mm2)
1	20	7	8.21	150*150*150	2432.59	320.00	0.0225	14.22	14.24	14.21
2	20	7	8.26	150*150*150	2447.41	326.00	0.0225	14.49		
3	20	7	8.14	150*150*150	2411.85	315.00	0.0225	14.00		
4	20	7	8.31	150*150*150	2462.22	319.00	0.0225	14.18	14.19	
5	20	7	8.32	150*150*150	2465.19	322.00	0.0225	14.31		
6	20	7	8.27	150*150*150	2450.37	317.00	0.0225	14.09		

Results: 7-days Compressive strength of Concrete is 14.21 N/mm2

Comments: 7-days Compressive strength of M20 Concrete should not be less than 14 N/mm2

Note:

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Mecadez Core Technologies Private Limited

Authorised Signature

Assistant Executive Engineer
Kodigehalli Sub Division
BBMP, Bangalore

Test Report
Concrete Compresive strength

Project Name	Package No.06 Consists of 14 Works
Client	Executive Engineer - Byatarayanapura Division
Job No	MCTPL/BBMP/EE/BTP/PMC/W-11/P-3877/2022-23/QR
Mix Type	M20 Concrete For Drain Wall
Contractor	M/s SMLP Aspahalts
Test Method	IS : 4031 (part 6)-1988 & Specification for Road & Bridge Works, MORT&H, Rev. V.
Location	Laboratory
Material	Concrete
Sample No	2
Casting Date	2-Dec-2022
Tested Date	9-Dec-2022

Cube	Concrete Grade	Age at Test (Days)	Weight (kg)	Dimension (LxWxH)	Density (kg/m^3)	Max. Load (KN)	Area (m^2)	Compressive Strength (N/mm^2)	Avg. Sample Strength	Avg. Strength (N/mm2)
1	20	7	7.98	150*150*150	2364.44	328.00	0.0225	14.58	14.47	14.47
2	20	7	8.12	150*150*150	2405.93	325.00	0.0225	14.44		
3	20	7	8.14	150*150*150	2411.85	324.00	0.0225	14.40		
4	20	7	8.21	150*150*150	2432.59	328.00	0.0225	14.58	14.47	
5	20	7	8.32	150*150*150	2465.19	321.00	0.0225	14.27		
6	20	7	8.35	150*150*150	2474.07	328.00	0.0225	14.58		

Results: 7-days Compressive strength of Concrete is 14.47 N/mm2

Comments: 7-days Compressive strength of M20 Concrete should not be less than 14 N/mm2

Note:

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Authorised Signature

Assistant Executive Engineer
Kodigehalli Sub Division
BBMP, Bangalore

Test Report
Concrete Compresive strength

Project Name	Package No.06 Consists of 14 Works
Client	Executive Engineer - Byatarayanapura Division
Job No	MCTPL/BBMP/EE/BTP/PMC/W-11/P-3877/2022-23/QR
Mix Type	M20 Concrete For Drain Wall
Contractor	M/s SMLP Aspahalts
Test Method	IS : 4031 (part 6)-1988 & Specification for Road & Bridge Works, MORT&H, Rev. V.
Location	Laboratory
Material	Concrete
Sample No	3
Casting Date	2-Dec-2022
Tested Date	9-Dec-2022

Cube	Concrete Grade	Age at Test (Days)	Weight (kg)	Dimension (LxWxH)	Density (kg/m^3)	Max. Load (KN)	Area (m^2)	Compressive Strength (N/mm^2)	Avg. Sample Strength	Avg. Strength (N/mm2)
1	20	7	8.07	150*150*150	2391.11	330.00	0.0225	14.67	14.56	14.56
2	20	7	8.21	150*150*150	2432.59	327.00	0.0225	14.53		
3	20	7	8.23	150*150*150	2438.52	326.00	0.0225	14.49		
4	20	7	8.30	150*150*150	2459.26	330.00	0.0225	14.67	14.56	
5	20	7	8.24	150*150*150	2441.48	323.00	0.0225	14.36		
6	20	7	8.35	150*150*150	2474.07	330.00	0.0225	14.67		

Results: 7-days Compressive strength of Concrete is 14.56 N/mm2

Comments: 7-days Compressive strength of M20 Concrete should not be less than 14 N/mm2

Note:

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Assistant Executive Engineer
Kodigehalli Sub Division
BBMP, Bangalore

Test Report
Concrete Compresive strength

Project Name	Package No.06 Consists of 14 Works
Client	Executive Engineer - Byatarayanapura Division
Job No	MCTPL/BBMP/EE/BTP/PMC/W-11/P-3877/2022-23/QR
Mix Type	M20 Concrete For Drain Wall
Contractor	M/s SMLP Aspahalts
Test Method	IS : 4031 (part 6)-1988 & Specification for Road & Bridge Works, MORT&H, Rev. V.
Location	Laboratory
Material	Concrete
Sample No	4
Casting Date	9-Dec-2022
Tested Date	16-Dec-2022

Cube	Concrete Grade	Age at Test (Days)	Weight (kg)	Dimension (LxWxH)	Density (kg/m^3)	Max. Load (KN)	Area (m^2)	Compressive Strength (N/mm^2)	Avg. Sample Strength	Avg. Strength (N/mm2)
1	20	7	8.17	150*150*150	2420.74	332.00	0.0225	14.76	14.65	14.65
2	20	7	8.31	150*150*150	2462.22	329.00	0.0225	14.62		
3	20	7	8.33	150*150*150	2468.15	328.00	0.0225	14.58		
4	20	7	8.40	150*150*150	2488.89	332.00	0.0225	14.76	14.65	
5	20	7	8.34	150*150*150	2471.11	325.00	0.0225	14.44		
6	20	7	8.45	150*150*150	2503.70	332.00	0.0225	14.76		

Results: 7-days Compressive strength of Concrete is 14.65 N/mm2

Comments: 7-days Compressive strength of M20 Concrete should not be less than 14 N/mm2

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Assistant Executive Engineer
Kodigehalli Sub Division
BBMP, Bangalore

Test Report
Concrete Compresive strength

Project Name	Package No.06 Consists of 14 Works
Client	Executive Engineer - Byatarayanapura Division
Job No	MCTPL/BBMP/EE/BTP/PMC/W-11/P-3877/2022-23/QR
Mix Type	M20 Concrete For Drain Wall
Contractor	M/s SMLP Aspahalts
Test Method	IS : 4031 (part 6)-1988 & Specification for Road & Bridge Works, MORT&H, Rev. V.
Location	Laboratory
Material	Concrete
Sample No	5
Casting Date	9-Dec-2022
Tested Date	16-Dec-2022

Cube	Concrete Grade	Age at Test (Days)	Weight (kg)	Dimension (LxWxH)	Density (kg/m^3)	Max. Load (KN)	Area (m^2)	Compressive Strength (N/mm^2)	Avg. Sample Strength	Avg. Strength (N/mm2)
1	20	7	8.26	150*150*150	2447.41	334.00	0.0225	14.84	14.74	14.74
2	20	7	8.40	150*150*150	2488.89	331.00	0.0225	14.71		
3	20	7	8.42	150*150*150	2494.81	330.00	0.0225	14.67		
4	20	7	8.49	150*150*150	2515.56	334.00	0.0225	14.84	14.74	
5	20	7	8.43	150*150*150	2497.78	327.00	0.0225	14.53		
6	20	7	8.54	150*150*150	2530.37	334.00	0.0225	14.84		

Results: 7-days Compressive strength of Concrete is 14.74 N/mm2

Comments: 7-days Compressive strength of M20 Concrete should not be less than 14 N/mm2

Note:

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iv. Any query regarding the report must be reported immediately.

Mecadez Core Technologies Private Limited

Authorised Signature

Assistant Executive Engineer
Kodigehalli Sub Division
BBMP, Bangalore

Test Report
Concrete Compresive strength

Project Name	Package No.06 Consists of 14 Works
Client	Executive Engineer - Byatarayanapura Division
Job No	MCTPL/BBMP/EE/BTP/PMC/W-11/P-3877/2022-23/QR
Mix Type	M20 Concrete For Drain Wall
Contractor	M/s SMLP Aspahalts
Test Method	IS : 4031 (part 6)-1988 & Specification for Road & Bridge Works, MORT&H, Rev. V.
Location	Laboratory
Material	Concrete
Sample No	6
Casting Date	9-Dec-2022
Tested Date	16-Dec-2022

Cube	Concrete Grade	Age at Test (Days)	Weight (kg)	Dimension (LxWxH)	Density (kg/m^3)	Max. Load (KN)	Area (m^2)	Compressive Strength (N/mm^2)	Avg. Sample Strength	Avg. Strength
1	20	7	8.36	150*150*150	2477.04	336.00	0.0225	14.93	14.83	14.83
2	20	7	8.50	150*150*150	2518.52	333.00	0.0225	14.80		
3	20	7	8.52	150*150*150	2524.44	332.00	0.0225	14.76		
4	20	7	8.59	150*150*150	2545.19	336.00	0.0225	14.93	14.83	
5	20	7	8.53	150*150*150	2527.41	329.00	0.0225	14.62		
6	20	7	8.64	150*150*150	2560.00	336.00	0.0225	14.93		

Results: 7-days Compressive strength of Concrete is 14.83 N/mm2
Comments: 7-days Compressive strength of M20 Concrete should not be less than 14 N/mm2

Note:
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Mecadez Core Technologies Private Limited

Authorised Signature

Assistant Executive Engineer
Kodigehalli Sub Division
BBMP, Bangalore

Test Report
Concrete Compresive strength

Project Name	Package No.06 Consists of 14 Works
Client	Executive Engineer - Byatarayanapura Division
Job No	MCTPL/BBMP/EE/BTP/PMC/W-11/P-3877/2022-23/QR
Mix Type	M20 Concrete For Drain Wall
Contractor	M/s SMLP Aspahalts
Test Method	IS : 4031 (part 6)-1988 & Specification for Road & Bridge Works, MORT&H, Rev. V.
Location	Laboratory
Material	Concrete
Sample No	1
Casting Date	2-Dec-2022
Tested Date	30-Dec-2022

Cube	Concrete Grade	Age at Test (Days)	Weight (kg)	Dimension (LxWxH)	Density (kg/m^3)	Max. Load (KN)	Area (m^2)	Compressive Strength (N/mm^2)	Avg. Sample Strength	Avg. Strength (N/mm2)
1	20	28	8.78	150*150*150	2601.48	469.00	0.0225	20.84	20.64	20.70
2	20	28	8.69	150*150*150	2574.81	453.00	0.0225	20.13		
3	20	28	8.77	150*150*150	2598.52	471.00	0.0225	20.93		
4	20	28	8.81	150*150*150	2610.37	469.00	0.0225	20.84	20.76	
5	20	28	8.64	150*150*150	2560.00	472.00	0.0225	20.98		
6	20	28	8.90	150*150*150	2637.04	460.00	0.0225	20.44		

Results: 28-days Compressive strength of Concrete is 20.70 N/mm2

Comments: 28-days Compressive strength of M20 Concrete should not be less than 20 N/mm2

Note:
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Mecadez Core Technologies Private Limited

Authorised Signature

Assistant Executive Engineer
Kodigehalli Sub Division
BBMP, Bangalore

Test Report
Concrete Compresive strength

Project Name	Package No.06 Consists of 14 Works
Client	Executive Engineer - Byatarayanapura Division
Job No	MCTPL/BBMP/EE/BTP/PMC/W-11/P-3877/2022-23/QR
Mix Type	M20 Concrete For Drain Wall
Contractor	M/s SMLP Aspahalts
Test Method	IS : 4031 (part 6)-1988 & Specification for Road & Bridge Works, MORT&H, Rev. V.
Location	Laboratory
Material	Concrete
Sample No	2
Casting Date	2-Dec-2022
Tested Date	30-Dec-2022

Cube	Concrete Grade	Age at Test (Days)	Weight (kg)	Dimension (LxWxH)	Density (kg/m^3)	Max. Load (KN)	Area (m^2)	Compressive Strength (N/mm^2)	Avg. Sample Strength	Avg. Strength (N/mm2)
1	20	28	8.74	150*150*150	2589.63	470.00	0.0225	20.89	20.61	20.70
2	20	28	8.61	150*150*150	2551.11	459.00	0.0225	20.40		
3	20	28	8.46	150*150*150	2506.67	462.00	0.0225	20.53		
4	20	28	8.59	150*150*150	2545.19	469.00	0.0225	20.84	20.80	
5	20	28	8.97	150*150*150	2657.78	472.00	0.0225	20.98		
6	20	28	8.61	150*150*150	2551.11	463.00	0.0225	20.58		

Results: 28-days Compressive strength of Concrete is 20.70 N/mm2

Comments: 28-days Compressive strength of M20 Concrete should not be less than 20 N/mm2

Note:

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Authorised Signature

Assistant Executive Engineer
Kodigehalli Sub Division
BBMP, Bangalore

Test Report
Concrete Compresive strength

Project Name	Package No.06 Consists of 14 Works
Client	Executive Engineer Byatarayanapura Division
Job No	MCTPL/BBMP/EE/BTP/PMC/W-11/P-3877/2022-23/QR
Mix Type	M20 Concrete For Drain Wall
Contractor	M/s SMLP Aspahalts
Test Method	IS : 4031 (part 6)-1988 & Specification for Road & Bridge Works, MORT&H, Rev. V.
Location	Laboratory
Material	Concrete
Sample No	3
Casting Date	2-Dec-2022
Tested Date	30-Dec-2022

Cube	Concrete Grade	Age at Test (Days)	Weight (kg)	Dimension (LxWxH)	Density (kg/m^3)	Max. Load (KN)	Area (m^2)	Compressive Strength (N/mm^2)	Avg. Sample Strength	Avg. Strength (N/mm2)
1	20	28	8.83	150*150*150	2616.30	472.00	0.0225	20.98	20.70	20.79
2	20	28	8.70	150*150*150	2577.78	461.00	0.0225	20.49		
3	20	28	8.55	150*150*150	2533.33	464.00	0.0225	20.62		
4	20	28	8.68	150*150*150	2571.85	471.00	0.0225	20.93	20.89	
5	20	28	9.06	150*150*150	2684.44	474.00	0.0225	21.07		
6	20	28	8.70	150*150*150	2577.78	465.00	0.0225	20.67		

Results: 28-days Compressive strength of Concrete is 20.79 N/mm2

Comments: 28-days Compressive strength of M20 Concrete should not be less than 20 N/mm2

Note:

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Authorised Signature

Assistant Executive Engineer
Kodigehalli Sub Division
BBMP, Bangalore

Test Report
Concrete Compresive strength

Project Name	Package No.06 Consists of 14 Works
Client	Executive Engineer - Byatarayanapura Division
Job No	MCTPL/BBMP/EE/BTP/PMC/W-11/P-3877/2022-23/QR
Mix Type	M20 Concrete For Drain Wall
Contractor	M/s SMLP Aspahalts
Test Method	IS : 4031 (part 6)-1988 & Specification for Road & Bridge Works, MORT&H, Rev. V.
Location	Laboratory
Material	Concrete
Sample No	3
Casting Date	2-Dec-2022
Tested Date	30-Dec-2022

Cube	Concrete Grade	Age at Test (Days)	Weight (kg)	Dimension (LxWxH)	Density (kg/m^3)	Max. Load (KN)	Area (m^2)	Compressive Strength (N/mm^2)	Avg. Sample Strength	Avg. Strength (N/mm2)
1	20	28	8.83	150*150*150	2616.30	472.00	0.0225	20.98	20.70	20.79
2	20	28	8.70	150*150*150	2577.78	461.00	0.0225	20.49		
3	20	28	8.55	150*150*150	2533.33	464.00	0.0225	20.62		
4	20	28	8.68	150*150*150	2571.85	471.00	0.0225	20.93	20.89	
5	20	28	9.06	150*150*150	2684.44	474.00	0.0225	21.07		
6	20	28	8.70	150*150*150	2577.78	465.00	0.0225	20.67		

Results: 28-days Compressive strength of Concrete is 20.79 N/mm2

Comments: 28-days Compressive strength of M20 Concrete should not be less than 20 N/mm2

Note:
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Authorised Signature

Assistant Executive Engineer
Kodigehalli Sub Division
BBMP, Bangalore

Test Report
Concrete Compresive strength

Project Name	Package No.06 Consists of 14 Works
Client	Executive Engineer - Byatarayanapura Division
Job No	MCTPL/BBMP/EE/BTP/PMC/W-11/P-3877/2022-23/QR
Mix Type	M20 Concrete For Drain Wall
Contractor	M/s SMLP Aspahalts
Test Method	IS : 4031 (part 6)-1988 & Specification for Road & Bridge Works, MORT&H, Rev. V.
Location	Laboratory
Material	Concrete
Sample No	4
Casting Date	9-Dec-2022
Tested Date	6-Jan-2023

Cube	Concrete Grade	Age at Test (Days)	Weight (kg)	Dimension (LxWxH)	Density (kg/m^3)	Max. Load (KN)	Area (m^2)	Compressive Strength (N/mm^2)	Avg. Sample Strength	Avg. Strength (N/mm2)
1	20	28	8.93	150*150*150	2645.93	474.00	0.0225	21.07	20.79	20.88
2	20	28	8.80	150*150*150	2607.41	463.00	0.0225	20.58		
3	20	28	8.65	150*150*150	2562.96	466.00	0.0225	20.71		
4	20	28	8.78	150*150*150	2601.48	473.00	0.0225	21.02	20.98	
5	20	28	9.16	150*150*150	2714.07	476.00	0.0225	21.16		
6	20	28	8.80	150*150*150	2607.41	467.00	0.0225	20.76		

Results: 28-days Compressive strength of Concrete is 20.88 N/mm2

Comments: 28-days Compressive strength of M20 Concrete should not be less than 20 N/mm2

Note:
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Authorised Signature

Assistant Executive Engineer
Kodigehalli Sub Division
BBMP, Bangalore

Test Report
Concrete Compresive strength

Project Name	Package No.06 Consists of 14 Works
Client	Executive Engineer - Byatarayanapura Division
Job No	MCTPL/BBMP/EE/BTP/PMC/W-11/P-3877/2022-23/QR
Mix Type	M20 Concrete For Drain Wall
Contractor	M/s SMLP Aspahalts
Test Method	IS : 4031 (part 6)-1988 & Specification for Road & Bridge Works, MORT&H, Rev. V.
Location	Laboratory
Material	Concrete
Sample No	5
Casting Date	9-Dec-2022
Tested Date	6-Jan-2023

Cube	Concrete Grade	Age at Test (Days)	Weight (kg)	Dimension (LxWxH)	Density (kg/m^3)	Max. Load (KN)	Area (m^2)	Compressive Strength (N/mm^2)	Avg. Sample Strength	Avg. Strength (N/mm2)
1	20	28	9.02	150*150*150	2672.59	476.00	0.0225	21.16	20.87	20.97
2	20	28	8.89	150*150*150	2634.07	465.00	0.0225	20.67		
3	20	28	8.74	150*150*150	2589.63	468.00	0.0225	20.80		
4	20	28	8.87	150*150*150	2628.15	475.00	0.0225	21.11	21.07	
5	20	28	9.25	150*150*150	2740.74	478.00	0.0225	21.24		
6	20	28	8.89	150*150*150	2634.07	469.00	0.0225	20.84		

Results: 28-days Compressive strength of Concrete is 20.97 N/mm2

Comments: 28-days Compressive strength of M20 Concrete should not be less than 20 N/mm2

Note:
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Mecadez Core Technologies Private Limited

Authorised Signature

Assistant Executive Engineer
Kodigehalli Sub Division
BBMP, Bangalore

Test Report
Concrete Compresive strength

Project Name	Package No.06 Consists of 14 Works
Client	Executive Engineer - Byatarayanapura Division
Job No	MCTPL/BBMP/EE/BTP/PMC/W-11/P-3877/2022-23/QR
Mix Type	M20 Concrete For Drain Wall
Contractor	M/s SMLP Aspahalts
Test Method	IS : 4031 (part 6)-1988 & Specification for Road & Bridge Works, MORT&H, Rev. V.
Location	Laboratory
Material	Concrete
Sample No	6
Casting Date	9-Dec-2022
Tested Date	6-Jan-2023

Cube	Concrete Grade	Age at Test (Days)	Weight (kg)	Dimension (LxWxH)	Density (kg/m^3)	Max. Load (KN)	Area (m^2)	Compressive Strength (N/mm^2)	Avg. Sample Strength	Avg. Strength
1	20	28	9.12	150*150*150	2702.22	478.00	0.0225	21.24	20.96	21.06
2	20	28	8.99	150*150*150	2663.70	467.00	0.0225	20.76		
3	20	28	8.84	150*150*150	2619.26	470.00	0.0225	20.89		
4	20	28	8.97	150*150*150	2657.78	477.00	0.0225	21.20	21.16	
5	20	28	9.35	150*150*150	2770.37	480.00	0.0225	21.33		
6	20	28	8.99	150*150*150	2663.70	471.00	0.0225	20.93		

Results: 28-days Compressive strength of Concrete is 21.06 N/mm2
Comments: 28-days Compressive strength of M20 Concrete should not be less than 20 N/mm2

Note:
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Mecadez Core Technologies Private Limited

Authorised Signature

Assistant Executive Engineer
Kodigehalli Sub Division
BBMP, Bangalore

Mecadez Core Technologies Private Limited

Project Management Services

Summary of Frequencies of Field Tests and Lab Tests Conducted

Name of the work: **Package No.06 Consists of 14 Works**

Job No: **MCTPL/BBMP/EE/BTP/PMC/W-11/P-3877/2022-23/QR**

Contractor **M/s SMLP Aspahalts**

Sl. No	Particulars of the Tests	230mm Precast Slab Core Cut			
		Quantity Sqm	Frequency of Tests	Tests Required	Tests Carried Out
	Core Cutting				
1	Compressive strength test	28.32	One Test Per Source of supply	1	1

Note: Frequency of tests as per Specifications MORT&H, V Revision, Section 900.

Consultant

Contractor

ASSISTANT ENGINEER

Assistant Executive Engineer
Kodigehalli Sub Division
BBMP, Bangalore

ASSISTANT EXE ENGINEER

Test Report
Concrete Compressive strength

Project Name	Package No.06 Consists of 14 Works
Client	Executive Engineer - Byatarayanapura Division
Job No	MCTPL/BBMP/EE/BTP/PMC/W-11/P-3877/2022-23/QR
Mix Type	230mm Precast Slab Core Cut
Contractor	M/s SMLP Aspahalts
Test Method	IS : 4031 (part 6)-1988 & Specification for Road & Bridge Works, MORT&H, Rev. V.
Test Location	Laboratory
Sample No	1
Tested Date	9-Dec-2022

Sl. No.	Dia of Core D (mm)	Height of Core H (mm)	Core Wt (Kg)	Density of Core (Kg/m³)	H/D	Correction Factor (Based on H/D)	Failure Load (KN)	Core Strength (N/mm²)	Correction Factor for the dia. (Strength of the Core X 1.08)	Corrected Cylinder Compressive Strength (N/mm²)	Equivalent Cube Compressive Strength (N/mm²)
1	100.00	99.87	2.31	2943.83	0.9987	0.89	130.35	16.59	17.92	20.09	25.11
2	100.00	99.85	2.24	2855.19	0.9985	0.89	131.53	16.74	18.08	20.27	25.34
3	100.00	98.55	2.27	2931.6	0.9855	0.89	130.27	16.58	17.91	20.11	25.14

Results: Compressive strength of 230mm thick Precast Slab is 25.20 N/mm2

Note:

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For Mecadez Core Technologies Private Limited

Authorised Signature

Assistant Executive Engineer
Kodigehalli Sub Division
BBMP, Bangalore

Mecadez Core Technologies Private Limited

Project Management Services

Summary of Frequencies of Field Tests and Lab Tests Conducted

Name of the work: **Package No.06 Consists of 14 Works**

Job No: **MCTPL/BBMP/EE/BTP/PMC/W-11/P-3877/2022-23/QR**

Contractor **M/s SMLP Aspahalts**

Sl. No	Particulars of the Tests	100mm Precast Slab Core Cut			
	Core Cutting	Quantity Sqm	Frequency of Tests	Tests Required	Tests Carried Out
1	Compressive strength test	446.85	One Test Per Source of supply	1	1

Note: Frequency of tests as per Specifications MORT&H, V Revision, Section 900.

Consultant

contractor

ASSISTANT ENGINEER

ASSISTANT EXE ENGINEER
Kodigehalli Sub Division
BBMP, Bangalore

Test Report
Concrete Compressive strength

Project Name	Package No.06 Consists of 14 Works
Client	Executive Engineer - Byatarayanapura Division
Job No	MCTPL/BBMP/EE/BTP/PMC/W-11/P-3877/2022-23/QR
Mix Type	100mm Precast Slab Core Cut
Contractor	M/s SMLP Aspahalts
Test Method	IS : 4031 (part 6)-1988 & Specification for Road & Bridge Works, MORT&H, Rev. V.
Test Location	Laboratory
Sample No	1
Tested Date	17-Dec-2022

Sl. No.	Dia of Core D (mm)	Height of Core H (mm)	Core Wt (Kg)	Density of Core (Kg/m³)	H/D	Correction Factor (Based on H/D)	Failure Load (KN)	Core Strength (N/mm²)	Correction Factor for the dia. (Strength of the Core X 1.08)	Corrected Cylinder Compressive Strength (N/mm²)	Equivalent Cube Compressive Strength (N/mm²)
1	100.00	98.47	1.21	1563.93	0.9847	0.89	133.414	16.98	18.34	20.60	25.75
2	100.00	99.85	1.29	1644.28	0.9985	0.89	131.53	16.74	18.08	20.27	25.34
3	100.00	98.55	1.24	1601.4	0.9855	0.89	132.55	16.87	18.22	20.46	25.58

Results: Compressive strength of 100mm thick Precast Slab is 25.55 N/mm2

Note:

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For Mecadez Core Technologies Private Limited

Authorised Signature

Assistant Executive Engineer
Kodigehalli Sub Division
BBMP, Bangalore

Mecadez Core Technologies Private Limited

Project Management Consultancy Services

Summary of Frequencies of Field Tests and Lab Tests Conducted

Name of the work: **Package No.06 Consists of 14 Works**

Job No: **MCTPL/BBMP/EE/BTP/PMC/W-11/P-3877/2022-23/QR**

Contractor **M/s SMLP Aspahalts**

Sl. No	Particulars of the Tests	Wet Mix Macadam (WMM)			
		Quantity Cum	Frequency of Tests	Tests Required	Tests Carried Out
1	Aggregate Impact Value	332.90	1 Test / 1000 m^3	1	1
2	Combined Flakiness & Elongation Indices		1Test / 500 m^3	1	1
3	Aggregate gradation		1Test / 200 m^3	2	2
4	Atterberg limits		1Test / 200 m^3	2	2
5	Density of Compacted Layer		1 Test / 1000m^2	2	2

Note: Frequency of tests as per Specifications MORT&H, V Revision, Section 900.

Consultant

Contractor

ASSISTANT ENGINEER

ASSISTANT EXE ENGINEER

Assistant Executive Engineer
Kodigehalli Sub Division
BBMP, Bangalore

Test Report
Aggregate Impact Value

Project Name	Package No.06 Consists of 14 Works
Client	Executive Engineer - Byatarayanapura Division
Job No	MCTPL/BBMP/EE/BTP/PMC/W-11/P-3877/2022-23/QR
Mix Type	Wet Mix Macadam (WMM)
Contractor	M/s SMLP Aspahalts
Material	Coarse Aggregate
Test Method	IS : 2386 (Part - 4) 1963 & Specification for Road & Bridge Works, MORT&H, Rev. V.
Location	Laboratory
Sample No	1
Sample Collection Date	25-Dec-2022
Tested Date	26-Dec-2022

Sl. No.	Determination	Unit	Trails	
1	Weight of empty cylinder, w1	gm	960	960
2	Weight of container filled with Aggregate, w2	gm	1337	1343
3	Weight of the Aggregate before compaction, (w2 - w1) = w3	gm	377	383
4	Weight of the sample passing through 2.36 mm IS sieves after Impact, w4	gm	91	90
5	Weight of the sample retained on 2.36 mm IS sieve after Impact, w5	gm	286	293
6	Aggregate Impact Value (w4 / w3)x100	%	24.14	23.50
7	Specified Limit	%	30	

Results: Average Aggregate Impact Value: **23.82 %**

Note:

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For Mecadez Core Technologies Private Limited

Authorised Signature

Assistant Executive Engineer
Kodigehalli Sub Division
BBMP, Bangalore

Test Report
Aggregate Particle Shape

Project Name	Package No.06 Consists of 14 Works
Client	Executive Engineer - Byatarayanapura Division
Job No	MCTPL/BBMP/EE/BTP/PMC/W-11/P-3877/2022-23/QR
Mix Type	Wet Mix Macadam (WMM)
Contractor	M/s SMLP Aspahalts
Test Method	IS : 2386 (Part - 1) 1963 & Specification for Road & Bridge Works, MORT&H, Rev. V.
Location	Laboratory
Material	Coarse Aggregates
Sample No	1
Sample Collection Date	25-Dec-2022
Tested Date	26-Dec-2022

I.S. Sieves Size		Weight of Retained Sample on Each Sieve (minimum 200 Pieces) (gm)	Flakiness Index		Elongation Index	
Passing through IS Sieves (mm)	Retained on IS Sieves (mm)		Thickness Gauge	Weight of Aggregates in each fraction passing on thickness gauges (gm)	Length Gauge	Weight of Aggregates in Fraction retained on length gauges (gm)
63	50	0	33.9	0	-	0
50	40	0	27	0	81	0
40	25	38.46	19.5	0	58.5	0
31.5	25	62.35	16.95	0	-	0
25	20	1447.56	13.5	127.56	40.5	145.56
20	16	1406.25	10.8	85.25	32.4	112.25
16	12.5	956.36	8.55	151.36	25.6	158.36
12.5	10	523.46	6.75	125.46	20.2	131.46
10	6.3	258.36	4.89	80.36	14.7	87.36
	SW	4692.8	SWf	569.99	SWe	634.99

Flakiness Index 12.15 %
Elongation Index 13.53 %
Combined Flakiness and Elongation Indices : 25.68 %

Comments: Maximum allowable Combined Flakiness and Elongation Indices for WMM is 35%

Note:

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iv. Any query regarding the report must be reported immediately.

For Mecadez Core Technologies Private Limited

Authorised Signature

Assistant Executive Engineer
Kodigehalli Sub Division
BBMP, Bangalore

Test Report
Aggregate Gradation

Project Name	Package No.06 Consists of 14 Works
Client	Executive Engineer - Byatarayanapura Division
Job No	MCTPL/BBMP/EE/BTP/PMC/W-11/P-3877/2022-23/QR
Mix Type	Wet Mix Macadam (WMM)
Contractor	M/s SMLP Aspahalts
Test Method	IS : 2386 (Part - 1) 1963 & Specification for Road & Bridge Works, MORT&H, Rev. V.
Location	Laboratory
Material	Coarse Aggregates
Sample No	1
Sample Collection Date	25-Dec-2022
Tested Date	26-Dec-2022

Weight of Sample: 11093.00 gms

Sl. No.	I.S. Sieve size (mm)	Weight Retained (gm)	Percentage of weight Retained (%)	Cumulative Percentage of weight retained (%)	Cumulative % of Passing		Remarks
					Test Result	Gradation Limits as per MORT&H	
1	53	0	0	0	100	100	Gradation satisfies the MORT&H Specification for Wet Mix macadam
2	45	238.45	2.15	2.15	97.85	95-100	
3	22.4	2898.36	26.13	28.28	71.72	60-80	
4	11.2	2097.63	18.91	47.19	52.81	40-60	
5	4.75	2198.36	19.82	67.01	32.99	25-40	
6	2.36	1489.36	13.43	80.44	19.56	15-30	
7	0.6	589.36	5.31	85.75	14.25	8-22	
8	0.075	1354.26	12.21	97.96	2.04	0-5	

Note:

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For Mecadez Core Technologies Private Limited

Authorised Signature

Assistant Executive Engineer
Kodigehalli Sub Division
BBMP, Bangalore

Test Report
Aggregate Gradation

Project Name	Package No.06 Consists of 14 Works
Client	Executive Engineer - Byatarayanapura Division
Job No	MCTPL/BBMP/EE/BTP/PMC/W-11/P-3877/2022-23/QR
Mix Type	Wet Mix Macadam (WMM)
Contractor	M/s SMLP Aspahalts
Test Method	IS : 2386 (Part - 1) 1963 & Specification for Road & Bridge Works, MORT&H, Rev. V.
Location	Laboratory
Material	Coarse Aggregates
Sample No	2
Sample Collection Date	25-Dec-2022
Tested Date	26-Dec-2022

Weight of Sample: 11143.00 gms

Sl. No.	I.S. Sieve size (mm)	Weight Retained (gm)	Percentage of weight Retained (%)	Cumulative Percentage of weight retained (%)	Cumulative % of Passing		Remarks
					Test Result	Gradation Limits as per MORT&H	
1	53	0	0	0	100	100	Gradation satisfies the MORT&H Specification for Wet Mix macadam
2	45	256.36	2.3	2.3	97.7	95-100	
3	22.4	2749.36	24.67	26.97	73.03	60-80	
4	11.2	2108.64	18.92	45.89	54.11	40-60	
5	4.75	2184.26	19.6	65.49	34.51	25-40	
6	2.36	1529.1	13.72	79.21	20.79	15-30	
7	0.6	590.24	5.3	84.51	15.49	8-22	
8	0.075	1409.65	12.65	97.16	2.84	0-5	

Note:

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For Mecadez Core Technologies Private Limited

Authorised Signature

Assistant Executive Engineer
Kodigehalli Sub Division
BBMP, Bangalore

Test Report
Liquid and Plastic Limit by Cone Apparatus

Project Name	Package No.06 Consists of 14 Works
Client	Executive Engineer - Byatarayanapura Division
Job No	MCTPL/BBMP/EE/BTP/PMC/W-11/P-3877/2022-23/QR
Mix Type	Wet Mix Macadam (WMM)
Contractor	M/s SMLP Aspahalts
Test Method	Specification for Road & Bridge Works, MORT&H, Rev. V.
Location	Laboratory
Sample No	1
Sample Collection	25-Dec-2022
Tested Date	26-Dec-2022

Sl No	Description	Unit	Liquid Limit	Plastic Limit
	Penetration	mm	**Non Plastic**	**Non Plastic**
1	Container No	no		
2	Weight of container,(A)	gm		
3	Weight of container + wet soil, (B)	gm		
4	Weight of container + dry soil, (C)	gm		
5	Weight of water, D=(B - C)	gm		
6	Weight of dry soil, E=(C - A)	gm		
7	Water Content, D/E x 100 (%)	gm		

Comments: <6 so Non Plastic

Note:

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For Mecadez Core Technologies Private Limited

Authorised Signature

Assistant Executive Engineer
Kodigehalli Sub Division
BBMP, Bangalore

Test Report
Liquid and Plastic Limit by Cone Apparatus

Project Name	Package No.06 Consists of 14 Works
Client	Executive Engineer - Byatarayanapura Division
Job No	MCTPL/BBMP/EE/BTP/PMC/W-11/P-3877/2022-23/QR
Mix Type	Wet Mix Macadam (WMM)
Contractor	M/s SMLP Aspahalts
Test Method	Specification for Road & Bridge Works, MORT&H, Rev. V.
Location	Laboratory
Material	Soil
Sample No	2
Sample Collection	25-Dec-2022
Tested Date	26-Dec-2022

Sl No	Description	Unit	Liquid Limit	Plastic Limit
	Penetration	mm	**Non Plastic**	**Non Plastic**
1	Container No	no		
2	Weight of container,(A)	gm		
3	Weight of container + wet soil, (B)	gm		
4	Weight of container + dry soil, (C)	gm		
5	Weight of water, D=(B - C)	gm		
6	Weight of dry soil, E=(C - A)	'gm		
7	Water Content, D/E x 100 (%)	gm		

Comments: <6 so Non Plastic

Note:

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For Mecadez Core Technologies Private Limited

Authorised Signature

Assistant Executive Engineer
Kodigehalli Sub Division
BBMP, Bangalore

Test Report
Field Density Test by Sand Replacement Method

Project Name	Package No.06 Consists of 14 Works
Client	Executive Engineer - Byatarayanapura Division
Job No	MCTPL/BBMP/EE/BTP/PMC/W-11/P-3877/2022-23/QR
Mix Type	Wet Mix Macadam (WMM)
Contractor	M/s SMLP Aspahalts
Test Method	IS: 2720 (Part - 16) 1963 & Specification for Road & Bridge Works, MORT&H, Rev. V.
Location	At Site
Sample No	1
Tested Date	28-Dec-2022

Test Hole No	**1**
MDD	2.26
OMC in %	5.45
Bulk Density Ys	1.392
Weight of Sand In cone W1 (gm)	1195
Weight Of Wet soil From Hole (W2)	4942
Wt Of Sand +Cylinder Before Pouring (W3)gm	17000
Wt Of Sand +Cylinder After Pouring (W4) gm	12864
Wt Of Sand In Hole: W5 = W3 - W4- W1 (gm)	2941
Volume of Hole: V= W5/ Ys	2112.79
Bulk Density Yb= W2/V (gm/cc)	2.34
Moisture Meter Reading (%)	5.2
Moisture Content : w (From Graph In %)	-
Dry Density Yd = Yb/(1+W/100)	2.22
Field Compaction(%)	98.38

Note:

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For Mecadez Core Technologies Private Limited

Authorised Signature

Assistant Executive Engineer
Kodigehalli Sub Division
BBMP, Bangalore

Test Report
Field Density Test by Sand Replacement Method

Project Name	Package No.06 Consists of 14 Works
Client	Executive Engineer - Byatarayanapura Division
Job No	MCTPL/BBMP/EE/BTP/PMC/W-11/P-3877/2022-23/QR
Mix Type	Wet Mix Macadam (WMM)
Contractor	M/s SMLP Aspahalts
Test Method	IS: 2720 (Part - 16) 1963 & Specification for Road & Bridge Works, MORT&H, Rev. V.
Location	At Site
Sample No	2
Tested Date	28-Dec-2022

Test Hole No	**2**
MDD	2.26
OMC in %	5.45
Bulk Density Ys	1.39
Weight of Sand In cone W1 (gm)	1195.00
Weight Of Wet soil From Hole (W2)	4954.00
Wt Of Sand +Cylinder Before Pouring (W3)gm	17000.00
Wt Of Sand +Cylinder After Pouring (W4) gm	12867.00
Wt Of Sand In Hole: W5 = W3 - W4- W1 (gm)	2938.00
Volume of Hole: V= W5/ Ys	2110.63
Bulk Density Yb= W2/V (gm/cc)	2.35
Moisture Meter Reading (%)	5.30
Moisture Content : w (From Graph In %)	-
Dry Density Yd = Yb/(1+W/100)	2.23
Field Compaction(%)	98.63

Note:

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For Mecadez Core Technologies Private Limited

Authorised Signature

Assistant Executive Engineer
Kodigehalli Sub Division
BBMP, Bangalore

Mecadez Core Technologies Private Limited

Project Management Consultancy Services
Summary of Frequencies of Field Tests and Lab Tests Conducted

Name of the work: **Package No.06 Consists of 14 Works**

Job No: **MCTPL/BBMP/EE/BTP/PMC/W-11/P-3877/2022-23/QR**

Contractor **M/s SMLP Aspahalts**

Sl. No	Particulars of the Tests	Dense Graded Bituminous Macadam (DBM)			
		Quantity Cum	Frequency of Tests	Tests Required	Tests Carried Out
1	Quality of Binder	84.42	2 Test / lot	2	2
2	Aggregate Impact Value		1 Test / 350 m^3	1	1
3	Combined Flakiness & Elongation Indices		1 Test / 350 m^3	1	1
4	Aggregate Stripping Value		1Test / Source of Supply	1	1
5	Specific Gravity & Water Absorption of Aggregates		1Test / Source of Supply	1	1
6	Aggregate gradation		2 Test / day	2	2
7	Marshal Stability of the Mix		1 Test/400 tonnes (Min.2 Test)	2	2
8	Binder content and Mix Gradation		1 Test/400 tonnes (Min.2 Test)	2	2

Note: Frequency of tests as per Specifications MORT&H, V Revision, Section 900.

Consultant

Contractor

ASSISTANT ENGINEER

ASSISTANT EXE ENGINEER

Assistant Executive Engineer
Kodigehalli Sub Division
BBMP, Bangalore

Test Report
Quality of Bitumen

Project Name	Package No.06 Consists of 14 Works
Client	Executive Engineer - Byatarayanapura Division
Job No	MCTPL/BBMP/EE/BTP/PMC/W-11/P-3877/2022-23/QR
Mix Type	Dense Graded Bituminous Macadam (DBM)
Contractor	M/s SMLP Aspahalts
Test Method	IS : 73 – 2013 (Paving Bitumen) & Specification for Road & Bridge Works, MORT&H, Revision V.
Grade of Bitumen	VG30
Location	Hot Mix Plant
Material	Bitumen
Sample No	1
Sample Collection Date	24-Feb-2023
Tested Date	25-Feb-2023

Sl. No.	Description	Test Results	Requirement as per IS:73 - 2013
1	Penetration at 25^{0}C , 1 / 10 mm	49	Min. 45
2	Softening Point, (^{0}C)	51	Min. 47
3	Specific Gravity	1.1	Min. 0.97
4	Ductility at 27^{0}C, in cm	45	Min. 40
5	Flash Point, (^{0}C)	223	Min. 220

Note:

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For Mecadez Core Technologies Private Limited

Authorised Signature

Assistant Executive Engineer
Kodigehalli Sub Division
BBMP, Bangalore

Test Report
Quality of Bitumen

Project Name	Package No.06 Consists of 14 Works
Client	Executive Engineer - Byatarayanapura Division
Job No	MCTPL/BBMP/EE/BTP/PMC/W-11/P-3877/2022-23/QR
Mix Type	Dense Graded Bituminous Macadam (DBM)
Contractor	M/s SMLP Aspahalts
Test Method	IS : 73 – 2013 (Paving Bitumen) & Specification for Road & Bridge Works, MORT&H, Revision V.
Grade of Bitumen	VG30
Location	Hot Mix Plant
Material	Bitumen
Sample No	2
Sample Collection Date	24-Feb-2023
Tested Date	25-Feb-2023

Sl. No.	Description	Test Results	Requirement as per IS:73 - 2013
1	Penetration at 25^0C , 1 / 10 mm	52	Min. 45
2	Softening Point, (^{0}C)	53	Min. 47
3	Specific Gravity	1.1	Min. 0.97
4	Ductility at 27^0C, in cm	44	Min. 40
5	Flash Point, (^{0}C)	228	Min. 220

Note:

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For Mecadez Core Technologies Private Limited

Authorised Signature

Assistant Executive Engineer
Kodigehalli Sub Division
BBMP, Bangalore

Test Report
Aggregate Impact Value

Project Name	Package No.06 Consists of 14 Works
Client	Executive Engineer - Byatarayanapura Division
Job No	MCTPL/BBMP/EE/BTP/PMC/W-11/P-3877/2022-23/QR
Mix Type	Dense Graded Bituminous Macadam (DBM)
Contractor	M/s SMLP Aspahalts
Test Method	IS : 2386 (Part - 4) 1963 & Specification for Road & Bridge Works, MORT&H, Rev. V.
Location	Laboratory
Material	Aggregate
Sample No	1
Sample Collection Date	24-Feb-2023
Tested Date	27-Feb-2023

Sl. No.	Determination	Unit	Trails	
1	Weight of empty cylinder, w1	gm	960	960
2	Weight of container filled with Aggregate, w2	gm	1338	1335
3	Weight of the Aggregate before compaction, (w2 - w1) = w3	gm	378	375
4	Weight of the sample passing through 2.36 mm IS sieves after Impact, w4	gm	91	90
5	Weight of the sample retained on 2.36 mm IS sieve after Impact, w5	gm	287	285
6	Aggregate Impact Value (w4 / w3)x100	%	24.07	24.00
7	Specified Limit	%	27	

Results: Average Aggregate Impact Value: **24.04 %**

Note:

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For Mecadez Core Technologies Private Limited

Authorised Signature

Assistant Executive Engineer
Kodigehalli Sub Division
BBMP, Bangalore

Test Report
Aggregate Particle Shape

Project Name	Package No.06 Consists of 14 Works
Client	Executive Engineer - Byatarayanapura Division
Job No	MCTPL/BBMP/EE/BTP/PMC/W-11/P-3877/2022-23/QR
Mix Type	Dense Graded Bituminous Macadam (DBM)
Contractor	M/s SMLP Aspahalts
Test Method	IS : 2386 (Part - 1) 1963 & Specification for Road & Bridge Works, MORT&H, Rev. V.
Location	Laboratory
Material	Aggregates
Sample No	1
Sample Collection Date	24-Feb-2023
Tested Date	27-Feb-2023

I.S. Sieves Size		Weight of Retained Sample on Each Sieve (minimum 200 Pieces) (gm)	Flakiness Index		Elongation Index	
Passing through IS Sieves (mm)	Retained on IS Sieves (mm)		Thickness Gauge	Weight of Aggregates in each fraction passing on thickness gauges (gm)	Length Gauge	Weight of Aggregates in Fraction retained on length gauges (gm)
63	50	0	33.9	0	-	0
50	40	0	27	0	81	0
40	25	0	19.5	0	58.5	0
31.5	25	0	16.95	0	-	0
25	20	1432.94	13.5	112.94	40.5	130.94
20	16	1583.64	10.8	262.64	32.4	289.64
16	12.5	849.61	8.55	44.61	25.6	51.61
12.5	10	480.26	6.75	82.26	20.2	88.26
10	6.3	250.76	4.89	72.76	14.7	79.76
	SW	4597.21	SWf	575.21	SWe	640.21

Flakiness Index 12.83 %
Elongation Index 14.28 %
Combined Flakiness and Elongation Indices : 27.12 %

Comments: Maximum allowable Combined Flakiness and Elongation Indices for DBM is 35%.

Note:
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For Mecadez Core Technologies Private Limited

Authorised Signature

Assistant Executive Engineer
Kodigehalli Sub Division
BBMP, Bangalore

Test Report
Aggregate Stripping Value

Project Name	Package No.06 Consists of 14 Works
Client	Executive Engineer - Byatarayanapura Division
Job No	MCTPL/BBMP/EE/BTP/PMC/W-11/P-3877/2022-23/QR
Mix Type	Dense Graded Bituminous Macadam (DBM)
Contractor	M/s SMLP Aspahalts
Test Method	IS : 6241 - 1971 & Specification for Road & Bridge Works, MORT&H, Revision V.
Location	Laboratory
Material	Aggregates / Bitumen
Sample No	1
Tested Date	25-Feb-2023
Type of Aggregate	Coarse Aggregate
Type of Binder	Coarse Aggregate
Percentage of Binder Used	5% by weight
Total weight of Aggregate	200 gms
Total weight of Binder	10 gms
Temperature of water bath	40^0C

Observation Number	Stripping Percentage	Average Percentage	Average Retained Coating (%)
1	3.4	3.5	96.5
2	3.6		
3	3.5		

Comments: Minimum allowable Aggregate Stripping Value for Dense Bituminous Macadam is 95%

Note:
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For Mecadez Core Technologies Private Limited

Authorised Signature

Assistant Executive Engineer
Kodigehalli Sub Division
BBMP, Bangalore

Test Report

Specific Gravity and Water Absorption

Project Name	Package No.06 Consists of 14 Works
Client	Executive Engineer - Byatarayanapura Division
Job No	MCTPL/BBMP/EE/BTP/PMC/W-11/P-3877/2022-23/QR
Mix Type	Dense Graded Bituminous Macadam (DBM)
Contractor	M/s SMLP Aspahalts
Test Method	IS: 2386 (Part - 111) 1963 & Specification for Road & Bridge Works, MORT&H, Rev. V.
Location	Laboratory
Material	Aggregates
Sample No	1
Sample Collection Date	24-Feb-2023
Tested Date	25-Feb-2023

Sl. No.	Particulars	Computations	Test Numbers		Mean
			Test 1	Test 2	
1	Weight of Empty Basket Immersed in Water	W_1 g	761	763	
2	Wt of Basket Filled with Aggregates Immersed in water	W_2g	2045	2061	
3	Weight of Saturated Aggregate in water	W_sg = W_2- W_1	1284	1298	
4	Weight of saturated surface dry aggregate in Air	W_3 g	2080	2086	
5	Weight of water equal to the Volume of the Aggregate	W_3- W_s	796	788	
6	Weight of Oven dried Aggregate	W_4g	2045	2049	
7	Specific Gravity	W_4/(W_3- W_s)	2.57	2.60	2.58
8	Apparent Specific Gravity	W_4/(W_4- W_s)	2.69	2.73	2.71
9	Water Absorption	(W_4- W_3)*100/ W_4	1.71	1.81	1.76

Comments: Maximum allowable Aggregate Water Absorption value for Dense bituminous Macadam is 2.0%.

Note:

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For Mecadez Core Technologies Private Limited

Authorised Signature

Assistant Executive Engineer
Kodigehalli Sub Division
BBMP, Bangalore

Test Report
Aggregate Gradation

Project Name	Package No.06 Consists of 14 Works
Client	Executive Engineer - Byatarayanapura Division
Job No	MCTPL/BBMP/EE/BTP/PMC/W-11/P-3877/2022-23/QR
Mix Type	Dense Graded Bituminous Macadam (DBM)
Contractor	M/s SMLP Aspahalts
Test Method	IS : 2386 (Part - 1) 1963 & Specification for Road & Bridge Works, MORT&H, Rev. V.
Location	At Plant
Material	Aggregates
Sample No	1
Sample Collection Date	24-Feb-2023
Tested Date	27-Feb-2023

Weight of Sample: 10950 gms

Sl. No.	I.S. Sieve size (mm)	Weight Retained (gm)	Percentage of weight Retained (%)	Cumulative Percentage of weight retained (%)	Cumulative % of Passing		Remarks
					Test Result	Gradation Limits as per MORT&H	
1	37.5	0	0.00	0.00	100.00	100	Gradation satisfies the MORT&H Specification for Dense graded Bituminous Macadam
2	26.5	489.36	4.47	4.47	95.53	90-100	
3	19	1456.26	13.30	17.77	82.23	71-95	
4	13.2	1570.64	14.34	32.11	67.89	56-80	
5	4.75	2205.36	20.14	52.25	47.75	38-54	
6	2.36	1478.65	13.50	65.76	34.24	28-42	
7	0.3	2157.34	19.70	85.46	14.54	7-21	
8	0.075	1123.36	10.26	95.72	4.28	2-8	

Note:

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For Mecadez Core Technologies Private Limited

Authorised Signature

Assistant Executive Engineer
Kodigehalli Sub Division
BBMP, Bangalore

Test Report
Aggregate Gradation

Project Name	Package No.06 Consists of 14 Works
Client	Executive Engineer - Byatarayanapura Division
Job No	MCTPL/BBMP/EE/BTP/PMC/W-11/P-3877/2022-23/QR
Mix Type	Dense Graded Bituminous Macadam (DBM)
Contractor	M/s SMLP Aspahalts
Test Method	IS : 2386 (Part - 1) 1963 & Specification for Road & Bridge Works, MORT&H, Rev. V.
Location	At Plant
Material	Aggregates
Sample No	2
Sample Collection Date	24-Feb-2023
Tested Date	27-Feb-2023

Weight of Sample: 10890 gms

Sl. No.	I.S. Sieve size (mm)	Weight Retained (gm)	Percentage of weight Retained (%)	Cumulative Percentage of weight retained (%)	Cumulative % of Passing		Remarks
					Test Result	Gradation Limits as per MORT&H	
1	37.5	0	0.00	0.00	100.00	100	Gradation satisfies the MORT&H Specification for Dense graded Bituminous Macadam
2	26.5	509.36	4.68	4.68	95.32	90-100	
3	19	1478.36	13.58	18.25	81.75	71-95	
4	13.2	1590.36	14.60	32.86	67.14	56-80	
5	4.75	2223.36	20.42	53.27	46.73	38-54	
6	2.36	1498.65	13.76	67.03	32.97	28-42	
7	0.3	2177.34	19.99	87.03	12.97	7-21	
8	0.075	986.15	9.06	96.08	3.92	2-8	

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For Mecadez Core Technologies Private Limited

Mecadez Core Technologies Private Limited

Authorised Signature

Assistant Executive Engineer
Kodigehalli Sub Division
BBMP, Bangalore

Test Report
Stability of Mix

Project Name	Package No.06 Consists of 14 Works
Client	Executive Engineer - Byatarayanapura Division
Job No	MCTPL/BBMP/EE/BTP/PMC/W-11/P-3877/2022-23/QR
Mix Type	Dense Graded Bituminous Macadam (DBM)
Contractor	M/s SMLP Aspahalts
Test Method	Specification for Road & Bridge Works, MORT&H, Revision V.
Location	Laboratory
Sample No	1
Tested Date	2-Mar-2023

Sl. No.	Description	Unit	Test 1	Requirements as per MORT&H
1	Marshal Stability	KN	9.6	9 KN (min)
2	Marshal Flow	mm	4.1	2 – 5 mm
3	Percent of Air Voids in mix	%	4.3	3 - 6
4	Percent of Voids in Mineral Aggregates filled with Bitumen	%	69	65 – 75 %
5	Density	g/cc	2.3	-

Note:

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For Mecadez Core Technologies Private Limited

Authorised Signature

Assistant Executive Engineer
Kodigehalli Sub Division
BBMP, Bangalore

Test Report
Stability of Mix

Project Name	Package No.06 Consists of 14 Works
Client	Executive Engineer - Byatarayanapura Division
Job No	MCTPL/BBMP/EE/BTP/PMC/W-11/P-3877/2022-23/QR
Mix Type	Dense Graded Bituminous Macadam (DBM)
Contractor	M/s SMLP Aspahalts
Test Method	Specification for Road & Bridge Works, MORT&H, Revision V.
Location	Laboratory
Sample No	2
Tested Date	2-Mar-2023

Sl. No.	Description	Unit	Test 2	Requirements as per MORT&H
1	Marshal Stability	KN	9.3	9 KN (min)
2	Marshal Flow	mm	3.6	2 – 5 mm
3	Percent of Air Voids in mix	%	3.1	3 - 6
4	Percent of Voids in Mineral Aggregates filled with Bitumen	%	72	65 – 75 %
5	Density	g/cc	2.3	-

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For Mecadez Core Technologies Private Limited

Authorised Signature

Test Report
Binder Content and Mix Gradation

Project Name	Package No.06 Consists of 14 Works
Client	Executive Engineer - Byatarayanapura Division
Job No	MCTPL/BBMP/EE/BTP/PMC/W-11/P-3877/2022-23/QR
Mix Type	Dense Graded Bituminous Macadam (DBM)
Contractor	M/s SMLP Aspahalts
Test Method	Specification for Road & Bridge Works, MORT&H, Revision V.
Location	Laboratory
Sample No	1
Tested Date	2-Mar-2023

Sl. No.	Description	Unit	Computation	Test Result
1	Weight of Empty bowl before Extraction (E)	gm	Eb	1080
2	Weight of bowl + Sample before extraction (w_s)	gm	w_{sb}	1801
3	Weight of Sample taken for the test (S_b)	gm	$S_b = w_{sb} - Eb$	721
4	Weight of bowl + Sample after extraction (w_s)	gm	w_{sa}	1769
5	Weight of Sample after extraction (i.e. washed aggregates)	gm	$S_a = w_{sa} - Eb$	689
6	Weight of Filter paper before extraction (F_b)	gm	F_b	2
7	Weight of Filter paper after extraction (F_a)	gm	F_a	3
8	Weight of filler on filter paper (F_d)	gm	$F_d = F_b - F_a$	1
9	Weight of Bitumen without considering Filter paper (W_b)	gm	W_b	32
10	Weight of the Bitumen with considering Filter paper (W_a)	gm	$W_a = w_b + F_d$	33
11	Percentage of the Bitumen (i.e. Binder Content) ($\%_B$)	(%)	W_a/ SbX100	4.58

Sl. No.	I.S. Sieve size (mm)	Weight Retained (gm)	Percentage of weight Retained (%)	Cumulative Percentage of weight retained (%)	Cumulative % of Passing		Remarks
					Test Result	Gradation Limits as per MORT&H	
1	37.5	0	0.00	0.00	100.00	100	Gradation satisfies the MORT&H Specification for Dense graded biyuminous macadam
2	26.5	38.69	5.62	5.62	94.38	90-100	
3	19	75.36	10.94	16.55	83.45	71-95	
4	13.2	98.46	14.29	30.84	69.16	56-80	
5	4.75	115.42	16.75	47.60	52.40	38-54	
6	2.36	89.63	13.01	60.60	39.40	28-42	
7	0.3	135.74	19.70	80.30	19.70	7-21	
8	0.075	95.42	13.85	94.15	5.85	2-8	

For Mecadez Core Technologies Private Limited

Authorised Signature

Assistant Executive Engineer
Kodigehalli Sub Division
BBMP, Bangalore

Test Report
Binder Content and Mix Gradation

Project Name	Package No.06 Consists of 14 Works
Client	Executive Engineer - Byatarayanapura Division
Job No	MCTPL/BBMP/EE/BTP/PMC/W-11/P-3877/2022-23/QR
Mix Type	Dense Graded Bituminous Macadam (DBM)
Contractor	M/s SMLP Aspahalts
Test Method	Specification for Road & Bridge Works, MORT&H, Revision V.
Location	Laboratory
Sample No	2
Tested Date	2-Mar-2023

Sl. No.	Description	Unit	Computation	Test Result
1	Weight of Empty bowl before Extraction (E)	gm	Eb	1080
2	Weight of bowl + Sample before extraction (w_s)	gm	w_{sb}	1805
3	Weight of Sample taken for the test (S_b)	gm	$S_b = w_{sb} - Eb$	725
4	Weight of bowl + Sample after extraction (w_s)	gm	w_{sa}	1773
5	Weight of Sample after extraction (i.e. washed aggregates)	gm	$S_a = w_{sa} - Eb$	693
6	Weight of Filter paper before extraction (F_b)	gm	F_b	2
7	Weight of Filter paper after extraction (F_a)	gm	F_a	3
8	Weight of filler on filter paper (F_d)	gm	$F_d = F_b - F_a$	1
9	Weight of Bitumen without considering Filter paper (W_b)	gm	W_b	32
10	Weight of the Bitumen with considering Filter paper (W_a)	gm	$W_a = w_b + F_d$	33
11	Percentage of the Bitumen (i.e. Binder Content) ($\%_B$)	(%)	W_a/ SbX100	4.55

Sl. No.	I.S. Sieve size (mm)	Weight Retained (gm)	Percentage of weight Retained (%)	Cumulative Percentage of weight retained (%)	Cumulative % of Passing		Remarks
					Test Result	Gradation Limits as per MORT&H	
1	37.5	0	0.00	0.00	100.00	100	Gradation satisfies the MORT&H Specification for Dense graded biyuminous macadam
2	26.5	25.4	3.67	3.67	96.33	90-100	
3	19	75.91	10.95	14.62	85.38	71-95	
4	13.2	103.65	14.96	29.58	70.42	56-80	
5	4.75	121.45	17.53	47.10	52.90	38-54	
6	2.36	85.14	12.29	59.39	40.61	28-42	
7	0.3	145.32	20.97	80.36	19.64	7-21	
8	0.075	94.54	13.64	94.00	6.00	2-8	

For Mecadez Core Technologies Private Limited

Authorised Signature

Assistant Executive Engineer
Kodigchalli Sub Division
BBMP, Bangalore

Mecadez Core Technologies Private Limited

Project Management Consultancy Services

Summary of Frequencies of Field Tests and Lab Tests Conducted

Name of the work: **Package No.06 Consists of 14 Works**

Job No: **MCTPL/BBMP/EE/BTP/PMC/W-11/P-3877/2022-23/QR**

Contractor **M/s SMLP Aspahalts**

Sl. No	Particulars of the Tests	Bituminous Concrete (BC) Quantity Cum	Frequency of Tests	Tests Required	Tests Carried Out
1	Quality of Binder	101.89	2 Test / lot	2	2
2	Rate of Spread of Tack Coat/ Prime Coat		3 Test / Day	3	3
3	Aggregate Impact Value		1 Test / 350 m^3	1	1
4	Combined Flakiness & Elongation Indices		1 Test / 350 m^3	1	1
5	Aggregate Stripping Value		1Test / Source of Supply	1	1
6	Specific Gravity & Water Absorption of Aggregates		1Test / Source of Supply	1	1
7	Aggregate gradation		2 Test / day	2	2
8	Marshal Stability of the Mix		1 Test/400 tonnes (Min. 2 Test)	2	2
9	Binder content and Mix Gradation		1 Test/400 tonnes (Min. 2 Test)	2	2

Note: Frequency of tests as per Specifications MORT&H, V Revision, Section 900.

Consultant

Contractor

ASSISTANT ENGINEER

ASSISTANT EXE... ENGINEER

Assistant Executive Engineer
Kodigehalli Sub Division
BBMP, Bangalore

Test Report
Quality of Bitumen

Project Name	Package No.06 Consists of 14 Works
Client	Executive Engineer - Byatarayanapura Division
Job No	MCTPL/BBMP/EE/BTP/PMC/W-11/P-3877/2022-23/QR
Mix Type	Bituminous Concrete (BC)
Contractor	M/s SMLP Aspahalts
Test Method	IS : 73 – 2013 (Paving Bitumen) & Specification for Road & Bridge Works, MORT&H, Revision V.
Grade of Bitumen	VG30
Location	Hot Mix Plant
Material	Bitumen
Sample No	1
Sample Collection Date	26-Feb-2023
Tested Date	27-Feb-2023

Sl. No.	Description	Test Results	Requirement as per IS:73-2013
1	Penetration at 25^0C , 1 / 10 mm	47	Min. 45
2	Softening Point, (^{0}C)	51	Min. 47
3	Specific Gravity	0.99	Min. 0.97
4	Ductility at 27^0C, in cm	49	Min. 40
5	Flash Point, (^{0}C)	222	Min. 220

Note:

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For Mecadez Core Technologies Private Limited

Authorised Signature

Assistant Executive Engineer
Kodigehalli Sub Division
BBMP, Bangalore

Test Report
Quality of Bitumen

Project Name	Package No.06 Consists of 14 Works
Client	Executive Engineer - Byatarayanapura Division
Job No	MCTPL/BBMP/EE/BTP/PMC/W-11/P-3877/2022-23/QR
Mix Type	Bituminous Concrete (BC)
Contractor	M/s SMLP Aspahalts
Test Method	IS : 73 – 2013 (Paving Bitumen) & Specification for Road & Bridge Works, MORT&H, Revision V.
Grade of Bitumen	VG30
Location	Hot Mix Plant
Material	Bitumen
Sample No	2
Sample Collection Date	26-Feb-2023
Tested Date	27-Feb-2023

Sl. No.	Description	Test Results	Requirement as per IS:73-2013
1	Penetration at 25^0C , 1 / 10 mm	53	Min. 45
2	Softening Point, (^{0}C)	48	Min. 47
3	Specific Gravity	0.99	Min. 0.97
4	Ductility at 27^0C, in cm	50	Min. 40
5	Flash Point, (^{0}C)	225	Min. 220

Note:

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For Mecadez Core Technologies Private Limited

Authorised Signature

Assistant Executive Engineer
Kodigehalli Sub Division
BBMP, Bangalore

Test Report
Rate of Spread of Tack Coat

Project Name	Package No.06 Consists of 14 Works
Client	Executive Engineer - Byatarayanapura Division
Job No	MCTPL/BBMP/EE/BTP/PMC/W-11/P-3877/2022-23/QR
Mix Type	Bituminous Concrete (BC)
Contractor	M/s SMLP Aspahalts
Location	At Site
Material	Bitumen (Tack Coat)
Sample No	1
Tested Date	4-Mar-2023

Sl. No.	Determination	Unit	Test No 1		
			Longitudinal Distribution		
1	Size of Plate (mxn)	m^2	0.2x0.2	0.2x0.2	0.2x0.2
2	Area of the Plate (a)	m^2	0.04	0.04	0.04
3	Initial weight of the empty Plate (b)	kg	1.641	1.641	1.641
4	Final weight of plate after application of Tack Coat (c)	kg	1.652	1.653	1.65
5	Weight of Prime coat/ Tack Coat (d = c-b)	kg	0.011	0.012	0.009
6	Rate of spread (d/a)	kg / m^2	0.275	0.3	0.225
7	Average	kg / m^2	0.267		
8	Specified Limit	kg / m^2	Not less than 0.25 kg / m^2		

Results: Rate of Spread of Tack Coat is: 0.267 kg / m2

Note:

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For Mecadez Core Technologies Private Limited

Authorised Signature

Assistant Executive Engineer
Kodigehalli Sub Division
BBMP, Bangalore

Test Report
Rate of Spread of Tack Coat

Project Name	Package No.06 Consists of 14 Works
Client	Executive Engineer - Byatarayanapura Division
Job No	MCTPL/BBMP/EE/BTP/PMC/W-11/P-3877/2022-23/QR
Mix Type	Bituminous Concrete (BC)
Contractor	M/s SMLP Aspahalts
Location	At Site
Material	Bitumen (Tack Coat)
Sample No	2
Tested Date	4-Mar-2023

Sl. No.	Determination	Unit	Test No 2		
			Longitudinal Distribution		
1	Size of Plate (mxn)	m^2	0.2x0.2	0.2x0.2	0.2x0.2
2	Area of the Plate (a)	m^2	0.04	0.04	0.04
3	Initial weight of the empty Plate (b)	kg	1.641	1.641	1.641
4	Final weight of plate after application of Tack Coat (c)	kg	1.651	1.653	1.652
5	Weight of Prime coat/ Tack Coat (d = c-b)	kg	0.01	0.012	0.011
6	Rate of spread (d/a)	kg / m^2	0.25	0.3	0.275
7	Average	kg / m^2	0.275		
8	Specified Limit	kg / m^2	Not less than 0.25 kg / m^2		

Results: Rate of Spread of Tack Coat is: 0.275 kg / m2

Note:

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For Mecadez Core Technologies Private Limited

Authorised Signature

Assistant Executive Engineer
Kodigehalli Sub Division
BBMP, Bangalore

Test Report
Rate of Spread of Tack Coat

Project Name	Package No.06 Consists of 14 Works
Client	Executive Engineer - Byatarayanapura Division
Job No	MCTPL/BBMP/EE/BTP/PMC/W-11/P-3877/2022-23/QR
Mix Type	Bituminous Concrete (BC)
Contractor	M/s SMLP Aspahalts
Location	At Site
Material	Bitumen (Tack Coat)
Sample No	3
Tested Date	4-Mar-2023

Sl. No.	Determination	Unit	Test No 3		
			Longitudinal Distribution		
1	Size of Plate (mxn)	m^2	0.2x0.2	0.2x0.2	0.2x0.2
2	Area of the Plate (a)	m^2	0.04	0.04	0.04
3	Initial weight of the empty Plate (b)	kg	1.641	1.641	1.641
4	Final weight of plate after application of Tack Coat (c)	kg	1.653	1.65	1.651
5	Weight of Prime coat/ Tack Coat (d = c-b)	kg	0.012	0.009	0.01
6	Rate of spread (d/a)	kg / m^2	0.3	0.225	0.25
7	Average	kg / m^2	0.258		
8	Specified Limit	kg / m^2	Not less than 0.25 kg / m^2		

Results: Rate of Spread of Tack Coat is: 0.258 kg / m2

Note:

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For Mecadez Core Technologies Private Limited

Authorised Signature

Assistant Executive Engineer
Kodigehalli Sub Division
BBMP, Bangalore

Test Report
Aggregate Impact Value

Project Name	Package No.06 Consists of 14 Works
Client	Executive Engineer - Byatarayanapura Division
Job No	MCTPL/BBMP/EE/BTP/PMC/W-11/P-3877/2022-23/QR
Mix Type	Bituminous Concrete (BC)
Contractor	M/s SMLP Aspahalts
Test Method	IS : 2386 (Part - 4) 1963 & Specification for Road & Bridge Works, MORT&H, Rev. V.
Location	Laboratory
Material	Coarse Aggregate
Sample No	1
Sample Collection Date	26-Feb-2023
Tested Date	3-Mar-2023

Sl. No.	Determination	Unit	Trails	
1	Weight of empty cylinder, w1	gm	960	960
2	Weight of container filled with Aggregate, w2	gm	1394	1386
3	Weight of the Aggregate before compaction, (w2 - w1) = w3	gm	434	426
4	Weight of the sample passing through 2.36 mm IS sieves after Impact, w4	gm	90	91
5	Weight of the sample retained on 2.36 mm IS sieve after Impact, w5	gm	344	335
6	Aggregate Impact Value (w4 / w3)x100	%	20.74	21.36
7	Specified Limit	%	24	

Results: Average Aggregate Impact Value: **21.05** %

Note:

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For Mecadez Core Technologies Private Limited

Authorised Signature

Assistant Executive Engineer
Kodigehalli Sub Division
BBMP, Bangalore

Test Report
Aggregate Particle Shape

Project Name	Package No.06 Consists of 14 Works
Client	Executive Engineer - Byatarayanapura Division
Job No	MCTPL/BBMP/EE/BTP/PMC/W-11/P-3877/2022-23/QR
Mix Type	Bituminous Concrete (BC)
Contractor	M/s SMLP Aspahalts
Test Method	IS : 2386 (Part - 1) 1963 & Specification for Road & Bridge Works, MORT&H, Rev. V.
Location	Laboratory
Material	Coarse Aggregates
Sample No	1
Sample Collection Date	26-Feb-2023
Teested Date	3-Mar-2023

I.S. Sieves Size			Flakiness Index		Elongation Index	
Passing through IS Sieves (mm)	Retained on IS Sieves (mm)	Weight of Retained Sample on Each Sieve (minimum 200 Pieces) (gm)	Thickness Gauge	Weight of Aggregates in each fraction passing on thickness gauges (gm)	Length Gauge	Weight of Aggregates in Fraction retained on length gauges (gm)
63	50	0	33.9	0	-	0
50	40	0	27	0	81	0
40	25	0	19.5	0	58.5	0
31.5	25	0	16.95	0	-	0
25	20	1596.34	13.5	276.34	40.5	294.34
20	16	1387.36	10.8	66.36	32.4	93.36
16	12.5	981.61	8.55	176.61	25.6	183.61
12.5	10	510.23	6.75	112.23	20.2	118.23
10	6.3	281.65	4.89	103.65	14.7	110.65
	SW	4757.19	SWf	735.19	SWe	800.19

Flakiness Index 15.45 %
Elongation Index 16.82 %
Combined Flakiness and Elongation Indices : 32.27 %

Comments: Maximum allowable Combined Flakiness and Elongation Indices for Bituminous Concrete is 35%.

Note:

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For Mecadez Core Technologies Private Limited

Authorised Signature

Assistant Executive Engineer
Kodigehalli Sub Division
BBMP, Bangalore

Test Report
Aggregate Stripping Value

Project Name	Package No.06 Consists of 14 Works
Client	Executive Engineer - Byatarayanapura Division
Job No	MCTPL/BBMP/EE/BTP/PMC/W-11/P-3877/2022-23/QR
Mix Type	Bituminous Concrete (BC)
Contractor	M/s SMLP Aspahalts
Test Method	IS : 6241 - 1971 & Specification for Road & Bridge Works, MORT&H, Revision V.
Location	Laboratory
Material	Coarse Aggregates / Bitumen
Sample No	1
Tesed Date	27-Feb-2023
Type of Aggregate	Coarse Aggregate
Type of Binder	60 / 70 Grade
Percentage of Binder Used	5% by weight
Total weight of Aggregate	200 gms
Total weight of Binder	10 gms
Temperature of water bath	40^0C

Observation Number	Stripping Percentage	Average Percentage	Average Retained Coating (%)
1	3.5	3.37	96.63
2	3.4		
3	3.2		

Comments: Minimum allowable Aggregate Stripping Value for Bituminous Concrete is 95%

Note:
i. The results indicated above are based on the tests carried out on the sample at site.
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For Mecadez Core Technologies Private Limited

Authorised Signature

Assistant Executive Engineer
Kodigehalli Sub Division
BBMP, Bangalore

Test Report

Specific Gravity and Water Absorption

Project Name	Package No.06 Consists of 14 Works
Client	Executive Engineer - Byatarayanapura Division
Job No	MCTPL/BBMP/EE/BTP/PMC/W-11/P-3877/2022-23/QR
Mix Type	Bituminous Concrete (BC)
Contractor	M/s SMLP Aspahalts
Test	IS: 2386 (Part - 111) 1963 & Specification for Road & Bridge Works, MORT&H, Rev. V.
Location	Laboratory
Material	Coarse Aggregates
Sample No	1
Sapmle Collection Date	26-Feb-2023
Tested Date	27-Feb-2023

Sl. No.	Particulars	Computations	Test Numbers		Mean
			Test 1	Test 2	
1	Weight of Empty Basket Immersed in Water	W_1 g	761	763	
2	Wt of Basket Filled with Aggregates Immersed in water	W_2g	2069	2046	
3	Weight of Saturated Aggregate in water	$W_s g = W_2 - W_1$	1308	1283	
4	Weight of saturated surface dry aggregate in Air	W_3 g	2104	2071	
5	Weight of water equal to the Volume of the Aggregate	$W_3 - W_s$	796	788	
6	Weight of Oven dried Aggregate	W_4g	2066	2040	
7	Specific Gravity	$W_4/(W_3 - W_s)$	2.60	2.59	2.59
8	Apparent Specific Gravity	$W_4/(W_4 - W_s)$	2.73	2.69	2.71
9	Water Absorption	$(W_4 - W_3)*100/W_4$	1.84	1.52	1.68

Comments: Maximum allowable Aggregate Water Absorption value for Bituminous Concrete is 2.0%.

Note:

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For Mecadez Core Technologies Private Limited

Authorised Signature

Assistant Executive Engineer
Kodigehalli Sub Division
BBMP, Bangalore

Test Report
Aggregate Gradation

Project Name	Package No.06 Consists of 14 Works
Client	Executive Engineer - Byatarayanapura Division
Job No	MCTPL/BBMP/EE/BTP/PMC/W-11/P-3877/2022-23/QR
Mix Type	Bituminous Concrete (BC)
Contractor	M/s SMLP Aspahalts
Test Method	IS : 2386 (Part - 1) 1963 & Specification for Road & Bridge Works, MORT&H, Rev. V.
Location	Laboratory
Material	Coarse Aggregates
Sample No	1
Sample Collection Date	26-Feb-2023
Tested Date	3-Mar-2023

Weight of Sample: 4000 gms

Sl. No.	I.S. Sieve size (mm)	Weight Retained (gm)	Percentage of weight Retained (%)	Cumulative Percentage of weight retained (%)	Cumulative % of Passing		Remarks
					Test Result	Gradation Limits as per MORT&H	
1	19.00	0	0.00	0.00	100.00	100	Gradation satisfies the MORT&H Grade II Specification for Bituminous Concrete
2	13.20	173.26	4.33	4.33	95.67	90-100	
3	9.50	608.35	15.21	19.54	80.46	70-88	
4	4.75	720.36	18.01	37.55	62.45	53-71	
5	2.36	520.46	13.01	50.56	49.44	42-58	
6	1.18	359.36	8.98	59.54	40.46	34-48	
7	0.60	326.79	8.17	67.71	32.29	26-38	
8	0.30	351.37	8.78	76.50	23.50	18-28	
9	0.15	268.49	6.71	83.21	16.79	12-20	
10	0.075	392.89	9.82	93.03	6.97	4-10	

Note:
i. The results indicated above are based on the tests carried out on the sample at site.
ii. The results relate only to the items tested.
iii. This test report should not be reproduced except in full, without written approval of this laboratory.
iv. Any query regarding the report must be reported immediately.

For Mecadez Core Technologies Private Limited

Authorised Signature

Assistant Executive Engineer
Kodigehalli Sub Division
BBMP, Bangalore

Test Report
Aggregate Gradation

Project Name	Package No.06 Consists of 14 Works
Client	Executive Engineer - Byatarayanapura Division
Job No	MCTPL/BBMP/EE/BTP/PMC/W-11/P-3877/2022-23/QR
Mix Type	Bituminous Concrete (BC)
Contractor	M/s SMLP Aspahalts
Test Method	IS : 2386 (Part - 1) 1963 & Specification for Road & Bridge Works, MORT&H, Rev. V.
Location	Hot Mix Plant
Material	Coarse Aggregates
Sample No	2
Sample Collection Date	26-Feb-2023
Tested Date	3-Mar-2023

Weight of Sample: 4000 gms

Sl. No.	I.S. Sieve size (mm)	Weight Retained (gm)	Percentage of weight Retained (%)	Cumulative Percentage of weight retained (%)	Cumulative % of Passing		Remarks
					Test Result	Gradation Limits as per MORT&H	
1	19.00	0	0.00	0.00	100.00	100	Gradation satisfies the MORT&H Grade II Specification for Bituminous Concrete
2	13.20	179.46	4.49	4.49	95.51	90-100	
3	9.50	609.36	15.23	19.72	80.28	70-88	
4	4.75	723.46	18.09	37.81	62.19	53-71	
5	2.36	526.89	13.17	50.98	49.02	42-58	
6	1.18	364.89	9.12	60.10	39.90	34-48	
7	0.60	338.26	8.46	68.56	31.44	26-38	
8	0.30	354.37	8.86	77.42	22.58	18-28	
9	0.15	271.49	6.79	84.20	15.80	12-20	
10	0.075	396.89	9.92	94.13	5.87	4-10	

Note:

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For Mecadez Core Technologies Private Limited

Authorised Signature

Assistant Executive Engineer
Kodigehalli Sub Division
BBMP, Bangalore

Test Report
Stability of Mix

Project Name	Package No.06 Consists of 14 Works
Client	Executive Engineer - Byatarayanapura Division
Job No	MCTPL/BBMP/EE/BTP/PMC/W-11/P-3877/2022-23/QR
Mix Type	Bituminous Concrete (BC)
Contractor	M/s SMLP Aspahalts
Test Method	Specification for Road & Bridge Works, MORT&H, Revision V.
Location	Laboratory
Material	Bituminous Concrete mix
Sample No	1
Tesed Date	4-Mar-2023

Sl. No.	Description	Unit	Test 1	Requirements as per MORT&H
1	Marshal Stability	KN	9.5	9 KN (min)
2	Marshal Flow	mm	3.3	2 – 4 mm
3	Percent of Air Voids in mix	%	4.6	3 – 6 %
4	Percent of Voids in Mineral Aggregates filled with Bitumen	%	68	65 – 75 %
5	Density	g/cc	2.32	-

Note:
i. The results indicated above are based on the tests carried out on the sample at site.
ii. The results relate only to the items tested.
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For Mecadez Core Technologies Private Limited

Authorised Signature

Assistant Executive Engineer
Kodigehalli Sub Division
BBMP, Bangalore

Test Report
Stability of Mix

Project Name	Package No.06 Consists of 14 Works
Client	Executive Engineer - Byatarayanapura Division
Job No	MCTPL/BBMP/EE/BTP/PMC/W-11/P-3877/2022-23/QR
Mix Type	Bituminous Concrete (BC)
Contractor	M/s SMLP Aspahalts
Test Method	Specification for Road & Bridge Works, MORT&H, Revision V.
Location	Laboratory
Material	Bituminous Concrete mix
Sample No	2
Tesed Date	4-Mar-2023

Sl. No.	Description	Unit	Test 2	Requirements as per MORT&H
1	Marshal Stability	KN	9.7	9 KN (min)
2	Marshal Flow	mm	3.2	2 – 4 mm
3	Percent of Air Voids in mix	%	4.2	3 – 6 %
4	Percent of Voids in Mineral Aggregates filled with Bitumen	%	70	65 – 75 %
5	Density	g/cc	2.32	-

Note:

i. The results indicated above are based on the tests carried out on the sample at site.
ii. The results relate only to the items tested.
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For Mecadez Core Technologies Private Limited

Authorised Signature

Assistant Executive Engineer
Kodigehalli Sub Division
BBMP, Bangalore

Test Report
Binder Content and Mix Gradation

Project Name	Package No.06 Consists of 14 Works
Client	Executive Engineer - Byatarayanapura Division
Job No	MCTPL/BBMP/EE/BTP/PMC/W-11/P-3877/2022-23/QR
Mix Type	Bituminous Concrete (BC)
Contractor	M/s SMLP Aspahalts
Test Method	Specification for Road & Bridge Works, MORT&H, Revision V.
Location	Laboratory
Material	Bituminous Concrete mix
Sample No	1
Tesed Date	4-Mar-2023

Sl. No.	Description	Unit	Computation	Test Result
1	Weight of Empty bowl before Extraction (E)	gm	Eb	1080
2	Weight of bowl + Sample before extraction (w_s)	gm	w_{sb}	1725
3	Weight of Sample taken for the test (S_b)	gm	$S_b = w_{sb} - Eb$	645
4	Weight of bowl + Sample after extraction (w_s)	gm	w_{sa}	1694
5	Weight of Sample after extraction (i.e. washed aggregates)	gm	$S_a = w_{sa} - Eb$	614
6	Weight of Filter paper before extraction (F_b)	gm	F_b	2
7	Weight of Filter paper after extraction (F_a)	gm	F_a	4
8	Weight of filler on filter paper (F_d)	gm	$F_d = F_b - F_a$	2
9	Weight of Bitumen without considering Filter paper (W_b)	gm	W_b	34
10	Weight of the Bitumen with considering Filter paper (W_a)	gm	$W_a = w_b + F_d$	36
11	Percentage of the Bitumen (i.e. Binder Content) ($\%_B$)	(%)	W_a/ SbX100	5.58

Sl. No.	I.S. Sieve size (mm)	Weight Retained (gm)	Percentage of weight Retained (%)	Cumulative Percentage of weight retained (%)	Cumulative % of Passing		Remarks
					Test Result	Gradation Limits as per MORT&H	
1	19	0	0	0	100.00	100	Gradation satisfies the MORT&H Grade II Specification for Bituminous Concrete
2	13.2	40.26	6.56	6.56	93.44	90-100	
3	9.5	131.25	21.38	27.93	72.07	70-88	
4	4.75	98.63	16.06	44.00	56.00	53-71	
5	2.36	64.26	10.47	54.46	45.54	42-58	
6	1.18	54.79	8.92	63.39	36.61	34-48	
7	0.6	51.62	8.41	71.79	28.21	26-38	
8	0.3	42.58	6.93	78.73	21.27	18-28	
9	0.15	42.85	6.98	85.71	14.29	12-20	
10	0.075	52.34	8.52	94.23	5.77	4-10	

For Mecadez Core Technologies Private Limited

Authorised Signature

Assistant Executive Engineer
Kodigehalli Sub Division
BBMP, Bangalore

Test Report
Binder Content and Mix Gradation

Project Name	Package No.06 Consists of 14 Works
Client	Executive Engineer - Byatarayanapura Division
Job No	MCTPL/BBMP/EE/BTP/PMC/W-11/P-3877/2022-23/QR
Mix Type	Bituminous Concrete (BC)
Contractor	M/s SMLP Aspahalts
Test Method	Specification for Road & Bridge Works, MORT&H, Revision V.
Location	Laboratory
Material	Bituminous Concrete mix
Sample No	2
Tesed Date	4-Mar-2023

Sl. No.	Description	Unit	Computation	Test Result
1	Weight of Empty bowl before Extraction (E)	gm	Eb	1080
2	Weight of bowl + Sample before extraction (w_s)	gm	w_{sb}	1720
3	Weight of Sample taken for the test (S_b)	gm	$S_b = w_{sb} - Eb$	640
4	Weight of bowl + Sample after extraction (w_s)	gm	w_{sa}	1684
5	Weight of Sample after extraction (i.e. washed	gm	$S_a = w_{sa} - Eb$	604
6	Weight of Filter paper before extraction (F_b)	gm	F_b	2
7	Weight of Filter paper after extraction (F_a)	gm	F_a	4
8	Weight of filler on filter paper (F_d)	gm	$F_d = F_b - F_a$	2
9	Weight of Bitumen without considering Filter paper (W_b)	gm	W_b	33
10	Weight of the Bitumen with considering Filter paper (W_a)	gm	$W_a = w_b + F_d$	35
11	Percentage of the Bitumen (i.e. Binder Content) ($\%_B$)	(%)	W_a/ SbX100	5.47

Sl. No.	I.S. Sieve size (mm)	Weight Retained (gm)	Percentage of weight Retained (%)	Cumulative Percentage of weight retained (%)	Cumulative % of Passing		Remarks
					Test Result	Gradation Limits as per MORT&H	
1	19	0	0.00	0.00	100.00	100	Gradation satisfies the MORT&H Grade II Specification for Bituminous Concrete
2	13.2	42.36	7.01	7.01	92.99	90-100	
3	9.5	106.36	17.61	24.62	75.38	70-88	
4	4.75	103.14	17.08	41.70	58.30	53-71	
5	2.36	82.36	13.64	55.33	44.67	42-58	
6	1.18	51.42	8.51	63.85	36.15	34-48	
7	0.6	41.58	6.88	70.73	29.27	26-38	
8	0.3	49.31	8.16	78.90	21.10	18-28	
9	0.15	36.54	6.05	84.95	15.05	12-20	
10	0.075	59.85	9.91	94.85	5.15	4-10	

For Mecadez Core Technologies Private Limited

Authorised Signature

Assistant Executive Engineer
Kodigehalli Sub Division
BBMP, Bangalore

Mecadez Core Technologies Private Limited

Temperature Record Log Sheet

Project Name Package No.06 Consists of 14 Works

Client Executive Engineer - Byatarayanapura Division

Job No MCTPL/BBMP/EE/BTP/PMC/W-11/P-3877/2022-23/QR

Mix Type Dense Graded Bituminous Macadam(DBM)

Contractor M/s SMLP Aspahalts

Date: 2-Mar-2023

Sl No	Tipper No	Time	Cleaning of the Surface	Application of Tackcoat	Mix Laying Temperature (C^0)	Mix Rolling Temperature (C^0)	Depth of the Mix Before Rolling (mm)	Depth of the Mix After Rolling (mm)	Remarks
1	KA51 BD 7010	6.35AM	Yes	Yes	142.7	90.7	66	50	
2	KN2 BY 7282	7.00AM	Yes	Yes	145.7	91.9	65	50	
3	KA05 AB 412	7.32AM	Yes	Yes	141.6	92.1	65	50	
4	KA51 BD 7010	8.00AM	Yes	Yes	141.9	93.5	67	50	
5	KN2 BY 7282	8.36AM	Yes	Yes	144.5	92.6	65	50	
6	KA05 AB 412	9.00AM	Yes	Yes	143.6	93.1	66	50	

Mecadez Core Technologies Pvt. Ltd.

Consultant Representative

Asst Engineer
New Ward No. 11
BBMP

Asst.Executive Engineer
Kodigehalli Sub Division
BBMP

Assistant Executive Engineer
Kodigehalli Sub Division
BBMP, Bangalore

For Mecadez Core Technologies Private Limited
Temperature Record Log Sheet

Project Name	Package No.06 Consists of 14 Works
Client	Executive Engineer - Byatarayanapura Division
Job No	MCTPL/BBMP/EE/BTP/PMC/W-11/P-3877/2022-23/QR
Mix Type	Bituminous Concrete (BC)
Contractor	M/s SMLP Aspahalts
Date:	4-Mar-2023

Sl No	Tipper No	Time	Cleaning of the Surface	Application of Tackcoat	Mix Laying Temperature (C^0)	Mix Rolling Temperature (C^0)	Depth of the Mix Before Rolling (mm)	Depth of the Mix After Rolling (mm)	Remarks
1	KA51 BD 7010	6.00AM	Yes	Yes	142.6	90.7	54	40	
2	KN2 BY 7282	6.30AM	Yes	Yes	141.5	91.1	53	40	
3	KA05 AB 412	7.00AM	Yes	Yes	140.8	92.5	53	40	
4	KA51 BD 7010	7.30AM	Yes	Yes	145.7	93.4	53	40	
5	KN2 BY 7282	8.10AM	Yes	Yes	146.5	94.1	54	40	
6	KA05 AB 412	8.55AM	Yes	Yes	147.6	91.7	53	40	
7	KA51 BD 7010	9.45AM	Yes	Yes	142.8	92.4	53	40	

Core Technologies Private Limited MECADEZ

Consultant
Representative

Asst Engineer
New Ward No. 11
BBMP

Asst.Executive Engineer
Kodigehalli Sub Division
BBMP

Assistant Executive Engineer
Kodigehalli Sub Division
BBMP, Bangalore